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ABSTRACT

This needs assessment survey is the update of one conducted in the Pacific region in 1992. Results were intended to help the Pacific Region Educational Laboratory make decisions about the educational needs of children in the Pacific region. Nine general educational areas, with 34 needs, were defined and presented in questionnaire form. The needs assessment questionnaire was completed by 1,046 individuals from 9 states and nations in the Pacific (excluding Hawaii). Respondents included teachers, secondary school and university students, principals, district and central administrators, and community members, including parents. While there were slight differences among the nine entities, professional development, systemic reform, and resources and information acquisition were generally recognized as the most important areas for education in the Pacific region. The most progress was generally thought to have been made in professional development; governance, management, and planning; and curriculum and instruction. Use of technology, helping at-risk youth, and resource and information acquisition were considered the areas in most need of attention. The questionnaire is appended. (Contains 42 figures, 58 tables, and 12 references.) (SLD)

# EDUCATIONAL NEEDS ASSESSMENT FOR THE PACIFIC REGION 1993 - 1994


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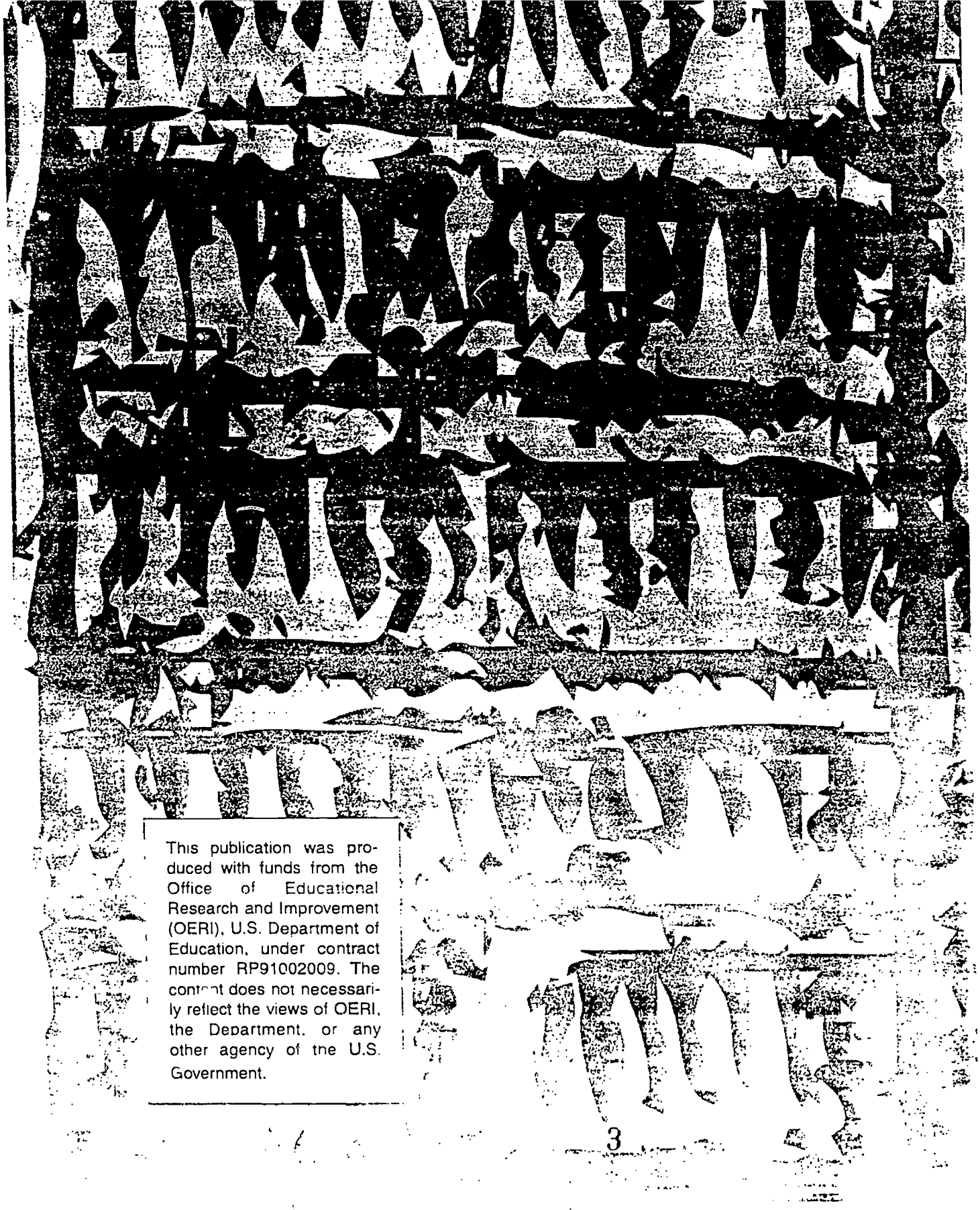
November 1995



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## EXECUTIVE SUMMARY

This needs assessment survey is part of the Pacific Region Educational Laboratory's (PREL) contract with the U.S. Department of Education's Office of Educational Research and Development (OERI).. It is the continuing update of the educational needs assessment that was conducted by PREL for the Pacific region in 1992. The results will assist PREL to better understand the continuing educational needs in the Pacific region and make decisions to effectively serve the educational needs of Pacific region children.

Different approaches can be used to assess needs in educational settings. After reviewing the literature and the consistency of previous need assessments, a discrepancy model was selected for this study. In this model, a "need" is a discrepancy or gap between desired performance and observed performance. Larger gaps mean greater needs. To assess the educational needs of the Pacific region, PREL, as directed by its Board of Directors, focused on nine general educational areas with 34 needs. These needs were reflected in PREL's contract with OERI. These 34 needs statements were presented as a questionnaire to respondents throughout the region. Respondents were asked to rate, on a seven-point scale, the **importance**, or perception of desired performance and the **progress**, or perception of actual performance for each need. The gaps between the ratings for " importance" and "progress" of performance were regarded as the magnitude of the educational **needs** in the region. The 34 needs were regrouped into the nine needs areas defined by PREL's Board of Directors.

Because of great distances and limited accessibility between entities, data collection required much effort from everyone involved in this study. Data were collected from December 1993 to September 1994. With the assistance of local R&D groups, data were collected by PREL staff who visited entities in the region. One-thousand and forty-six individuals from nine states and nations in the region responded to the needs assessment questionnaire. The respondents were teachers (including resource teachers), secondary school students, principals/assistant principals, district/central specialists, district/central administrators, college/university students, college/university faculty, parents (mostly PTA members), and community leaders. For purpose of this analysis, the roles of respondents were regrouped into five roles--students, teachers, principals, district/central administrators, and community. Teachers made up the largest group of the sample for the region (31.3 percent of the 1,046 respondents). Hawai'i was not involved in this process because of its vastly different level of needs compared to the rest of the Pacific. However, Hawai'i needs assessment was addressed through an alternative approach, as shown in the section on Hawai'i.

Highlights of the findings indicated that while there were slight differences among the nine entities:

1. *Professional development*, *systemic reform*, and *resource and information acquisition* were generally the most important areas for education in the Pacific region.

2. *Professional development*; *governance, management, and planning*; *curriculum and instruction* were the areas generally perceived as the most progress in the education of the Pacific region.

3. *Use of technology*, *at-risk youth*, and *resource and information acquisition* were generally identified as the most needed areas to address, as indicated by the largest gaps between "importance" and "progress" of each need area.

4. *Community, partnerships*; *small rural schools* and *governance, management and planning* were generally the least important areas for education in the Pacific region.

5. *Use of technology*, *at-risk youth,* and *community, partnerships* were generally perceived as the *least progress* areas for education in the Pacific region.

6. *Governance, management, and planning*; *professional development* and *community and partnerships* were generally viewed as the least needed areas to address in the Pacific region.

Because these findings were generally consistent among the entities and among the different roles of respondents, it was concluded that these findings are likely to have high reliability.

As with any study, this study had its limitations. One particular pitfall was the usage of terms without explicitly defining them. For example, the term "Small Rural Schools" seemed to have different levels of meaning in different Pacific region entities. This could have led to the low ratings of importance and/or progress for that particular need area. However, because the findings concerning importance, progress, and need were consistent among the entities as well as among the roles of the respondents, it is evident that they are legitimate for the Pacific region as a whole, at least during the period of data collection.

# INTRODUCTION

## Purpose of the Study

The focus of this study was to gather and present information to assist PREL's Board of Directors and staff make program decisions to effectively serve the educational needs of children throughout the Pacific region. Its purpose is to identify major educational issues of regional concern, and help decisionmakers take pertinent actions in addressing the most urgent needs of the 10 entities served by PREL.

## METHODOLOGY

### Instrumentation

The questionnaire used to collect data for the needs assessment was developed by PREL staff, based on historical needs that were reaffirmed and revised by the PREL Board of Directors. These 34 needs ( see Appendix) were grouped into the following 9 *need areas*:

1. Governance, Management, and Planning
2. Community, Partnerships
3. Small Rural Schools
4. At-Risk Youth
5. Curriculum and Instruction
6. Professional Development
7. Resource and Information Acquisition
8. Systemic Reform
9. Use of Technology

For each need, respondents were asked to rate, on a seven-point scale, the importance of that need in the respondent's jurisdiction, and progress made to date. In addition, each respondent was also asked to write down and rate any need that was not addressed in the 34 needs.

Besides rating items, respondents were asked to provide information concerning their agency/institution, role/position, history of participation in PREL's Regional Needs Assessment, and the entity they represented (see Appendix).

### Data collection

Data were collected from 1,046 respondents between December 1993 and September 1994. No particular systematic sampling method was used for this study. In comparison with regions served by other regional education laboratories throughout the nation, distances between the 10 entities are relatively large, and accessibility between them is limited. Most of the data collection was done by the local R&D support groups in each entity. PREL staff assisted by traveling to the entities and performing other tasks (e.g., workshop presentations). Because of distances and limited access, the data collection process demanded a great deal of effort on the part of everyone involved in this study. The respondents were teachers (including resource teachers), secondary school students, principals or assistant principals, district/central specialists, district/central office administrators, college/university students, college/university faculty, parents (mostly PTA members), and others.

The state of Hawai'i was not included because of its vastly different level of needs. Assessment procedures for the state of Hawai'i are described in a subsequent section of this report.

**Analysis**

Data were entered into a database and analyzed using the SPSS Windows statistical package for IBM Personal Computer. The original variables in the data set were as follows:

ENTITY: These entities include American Samoa; Federated States of Micronesia ( Chuuk, Kosrae, Pohnpei, Yap); Commonwealth of the Northern Mariana Islands (CNMI); Republic of the Marshall Islands (RMI); and Republic of Palau.

ROLE: The status or position of a respondent (i.e., teacher, district/central specialist, principal, etc.).

IMPORTANCE: For each of the 34 needs, respondents were asked, " How important is this need to your jurisdiction? "

PROGRESS: For each of the 34 needs, respondents were asked, " How much progress has been made ?"

These original variables were reorganized (i.e., recoded or regrouped) as follows, to simplify the analysis.

ENTITY: No changes.

ROLE: The nine roles specified in the instrument (questionnaire) were teacher/resource teacher, secondary school students, principals or assistant principals, district/central specialists, district/central office administrators, college/university students, college/university faculty, parents (mostly PTA members), and others. These nine roles were recoded into five roles according to respondents' educational background similarities, as shown in Table 1.

Table 1. List of Original Nine Roles Recoded into Five New Roles of Respondents

| Original Roles | New Roles |
|---|---|
| District/Central Administrator<br>District/Central Specialist | Administrator |
| Parent<br>Other | Community |
| Principal/Assistant Principal | Principal |
| Secondary School Student<br>College/University Student | Student |
| Teacher/Resource Teacher<br>College/University Faculty | Teacher |

IMPORTANCE and PROGRESS: The 34 assessment items were grouped into nine need areas, as shown in Table 2.

Table 2. **Importance** and **Progress** Variables Representing Nine Need Areas

| Need Area | Items Representing the Need Area |
|---|---|
| Governance, Management, and Planning | 1. Increase understanding of school administrators/leaders of the value of developing policies, rules, and guidelines.<br>2. Make better use of information for planning, policy development, and decision making.<br>3. Increase understanding among Board of Education members of their role and functions and the kinds of skills they may need to develop.<br>4. Improve the organization and management of the school(s).<br>5. Determine regional and local education system needs. |
| Community, Partnerships | 6. Decide which educational outcomes are valued by the community.<br>7. Develop and maintain effective school partnerships with businesses, community agencies, and organizations.<br>8. Clarify the role of the school to meet the demands for early childhood care and education. |
| Small Rural Schools | 9. Develop and carry out policies to provide better services in small rural schools.<br>10. Provide equitable learning opportunities and effective school practices in small/rural schools.<br>11. Increase understanding of the factors affecting educational opportunity in the more isolated schools. |

(Table continued on next page)

Table 2 (continued). **Importance** and **Progress** Variables Representing Nine Need Areas

| | |
|---|---|
| At-Risk Youth | 12. Develop and carry out policies and programs to provide services to at-risk youth.<br><br>13. Meet individual needs of students who are at risk of school failure.<br><br>14. Increase understanding of the factors affecting at-risk youth in the Pacific. |
| Curriculum and Instruction | 15. Improve student outcomes in math and science.<br><br>16. Assure that the curriculum is culturally appropriate.<br><br>17. Assure that students understand their own culture and respect the differences of other cultures.<br><br>18. Revise and/or develop appropriate curriculum structure and content.<br><br>19. Improve the relationship, connection, or match between schooling and economic/community development.<br><br>20. Improve the relationship, connection, or match between home/family learning styles and learning in preschools and elementary schools. |
| Professional Development | 21. Provide training to principals, teachers, and subject matter specialists.<br><br>22. Strengthen the abilities of the local people to design, plan, implement, and evaluate educational activities.<br><br>23. Improve upon current methods of assessing student performance.<br><br>24. Strengthen participation of institutions of higher education in professional development of public education personnel (i.e., teachers, principals, specialists, administrators). |

(Table continued on next page)

Table 2 (continued). **Importance** and **Progress** Variables Representing Nine Need Areas

| | |
|---|---|
| Resource and Information Acquisition | 25. Construct and/or remodel school facilities.<br><br>26. Assure sufficient and equitable funding for all schools.<br><br>27. Obtain information about curriculum, instruction, policy development, research, and evaluation. |
| Systemic Reform | 28. Involve teachers in school reform activities.<br><br>29. Involve teachers in setting various standards (i.e., curriculum standards, performance standards, teacher standards, etc.).<br><br>30. Promote active participation of teachers in the systemic reform of education. |
| Use of Technology | 31. Examine/identify the potential role of modern technology in the instructional process.<br><br>32. Use modern technology (especially Computer Assisted Instruction) at the classroom level.<br><br>33. Increase use of electronic means for information gathering, retrieval, and sharing with other practitioners to keep up with the latest promising/proven practices in education.<br><br>34. Involve educators in electronic networking to share resources and enhance their professional development. |

NEED: Ratings were assigned for **importance** and **progress** for each of the 34 needs. The discrepancy between the rating for **importance** and **progress** is the rating for **need**. Therefore, ratings for **need** were created by subtracting the rating for **progress** from the rating for **importance**. Then these 34 need ratings were grouped into ratings for the nine need areas listed at the beginning of this section.

**Reliability of the Needs Assessment**

Technically, the ratio of **true variance** divided by **obtained variance** equals reliability, which refers to *consistency* or *stability*. In other words, can measurements or observations be confirmed by further competent measurements or observations ? Here, the focus is interval consistency or homogeneity that reflects the extent to which items correlate among each need area. Cronbach's Alpha is used to estimate the reliability of the assessment. The results are shown in Tables 3 and 4.

Table 3. Cronbach's Alpha Coefficient for Importance of Nine Need Areas

| Need Area | No. of Items | Reliability Coefficient (Alpha) | Standardized Item (Alpha) |
|---|---|---|---|
| Governance, Management, and Planning | 5 | .8407 | .8439 |
| Community, Partnerships | 3 | .7759 | .7761 |
| Small Rural Schools | 3 | .8503 | .8516 |
| At-Risk Youth | 3 | .8751 | .8760 |
| Curriculum and Instruction | 6 | .8897 | .8910 |
| Professional Development | 4 | .8499 | .8507 |
| Resource and Information Acquisition | 3 | .8247 | .8247 |
| Systemic Reform | 3 | .8607 | .8609 |
| Use of Technology | 4 | .8983 | .8982 |

As shown in Table 3, the reliability of "importance" in the nine need areas was above 0.77; and the reliability of "importance" in five of nine need areas was higher than 0.85. These results indicate high correlation among items within each need area.

Table 4. Cronbach's Alpha Coefficient for Progress of Nine Need Areas

| Need Area | No. of Items | Reliability Coefficient (Alpha) | Standardized Item (Alpha) |
|---|---|---|---|
| Governance, Management, and Planning | 5 | .8954 | .8957 |
| Community, Partnerships | 3 | .8241 | .8242 |
| Small Rural Schools | 3 | .8889 | .8889 |
| At-Risk Youth | 3 | .8812 | .8813 |
| Curriculum and Instruction | 6 | .9122 | .9123 |
| Professional Development | 4 | .8857 | .8859 |
| Rescurce and Information Acquisition | 3 | .8505 | .8503 |
| Systemic Reform | 3 | .9034 | .9035 |
| Use of Technology | 4 | .9101 | .9106 |

As shown in Table 4, the reliability of "progress" in nine need areas was higher than 0.85, except for *community and partnerships*. These results again indicate high intercorrelation among items within each need area.

# ANALYSIS AND FINDINGS

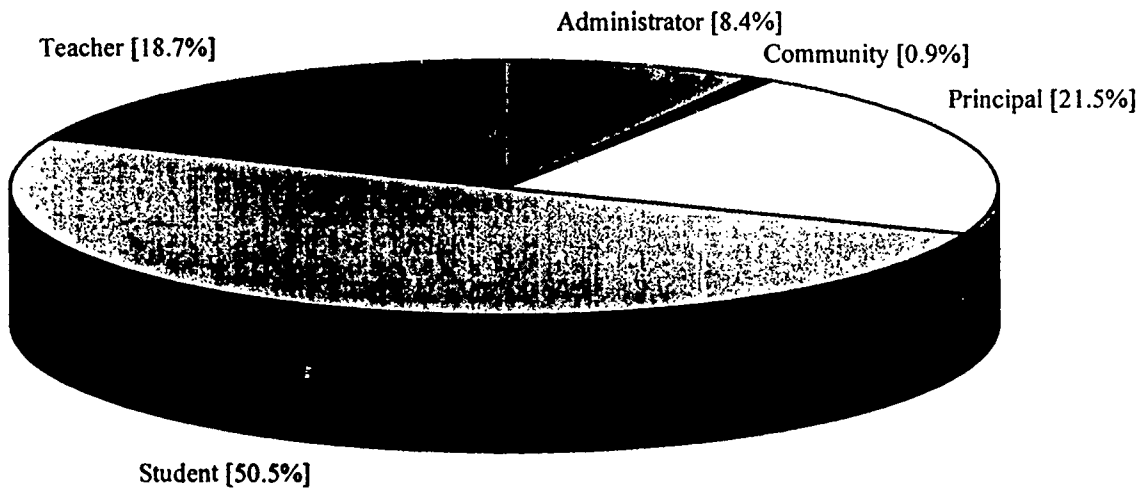
## AMERICAN SAMOA

American Samoa is located in the mid South Pacific, 2,600 miles from Honolulu, and has a total area of 70 square miles. The islands are home to 54,089 people (est. 1995), most of whom live on Tutuila. American Samoa is an unincorporated territory of the United States, whereby its citizens are U.S. nationals. As such, its citizens are free to enter the United States. An estimated 65,000 Samoans have migrated to the West Coast and some 20,000 live in Hawai'i. There are 33 public schools with a total of 14,375 students and 846 teachers in American Samoa (1994). The distribution of respondents from American Samoa enrolled in this study is shown in Figure 1.

***Figure 1***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*American Samoa*




**N = 107**

***Which of the nine educational need areas respondents in American Samoa view as the most important?***

Table 5. Mean Ratings for Importance of Nine Need Areas in American Samoa

| Need Area | Importance |
|---|---|
| Resource and Information Acquisition | 6.28 |
| Professional Development | 6.18 |
| System Reform | 6.12 |
| At-Risk Youth | 6.10 |
| Use of Technology | 6.09 |
| Curriculum and Instruction | 6.06 |
| Governance, Management, and Planning | 5.86 |
| Community, Partnerships | 5.76 |
| Small Rural Schools | 5.75 |

As shown in Table 5, *resource and information acquisition, professional development,* and *systemic reform* were perceived as the most important need areas in American Samoa. On a scale of 1 to 7, two-thirds of the ratings for need areas were above 6, and the difference between the lowest and highest ratings was only 0.53. As shown in Figure 1, almost 70 percent of the respondents were teachers and students. Because the majority of the respondents were from the classroom level, their viewpoint seems to be reflected in ratings of importance in the nine need areas.

***In which of the nine educational need areas respondents in American Samoa view progress ?***

Table 6. Mean Ratings for Progress of Nine Need Areas in American Samoa

| Need Area | Progress |
|---|---|
| Curriculum and Instruction | 4.02 |
| Professional Development | 3.91 |
| Governance, Management, and Planning | 3.70 |
| Systemic Reform | 3.59 |
| Small Rural Schools | 3.58 |
| Community, Partnerships | 3.46 |
| At-Risk Youth | 3.41 |
| Resource and Information Acquisition | 3.12 |
| Use of Technology | 3.05 |

In Table 6, *curriculum and instruction*, *professional development*, and *governance, management, and planning* show the most progress. *Use of technology*, *resource and information acquisition* and *at-risk youth* show the least progress in the nine educational need areas. In contrast to the high ratings of importance, the ratings of progress for all needs are below 4.1, which falls just above the halfway point on the rating scale of 1 to 7. The difference between the lowest and highest rating was only 0.97. This outcome is reflected in the majority of responses.

***In which need areas is the gap between the importance of a need area and its progress, the largest in American Samoa?***

Table 7. Mean Ratings for Need of Nine Need Areas in American Samoa

| Need Area | Need |
|---|---|
| Resource and Information Acquisition | 3.20 |
| Use of Technology | 3.06 |
| At-Risk Youth | 2.71 |
| Systemic Reform | 2.55 |
| Professional Development | 2.29 |
| Community, Partnership | 2.29 |
| Governance, Management and Planning | 2.23 |
| Small Rural Schools | 2.20 |
| Curriculum and Instruction | 2.05 |

As shown in Table 7, *resource and information acquisition, use of technology* and *at-risk youth* were among the top three most needed areas in American Samoa. *Curriculum and instruction*, *small rural schools*, and *governance, management and planning* were the least needed.

The difference between most and least need is 1.15. Seven out of nine needs in Table 7 are below 3.0, although a need could range from 0 to 7.

Table 7 also indicates that *resource and information acquisition* was relatively larger than other needs. Because the rating of that need area was highest for its importance (see Table 5), and second lowest for its progress (see Table 6), it is not surprising that this particular need area turns out to be the highest priority need. Certainly, it is an area to address in American Samoa.

Basically, the acquisition of *resource and information* depends on the availability of technology. Therefore, *use of technology* follows as the second largest need area in American Samoa.

***What is the difference between American Samoa and the Pacific region in importance, progress, and needs?***

In addition to ratings by entity, ratings for importance, progress, and gap between them (i.e., needs) were compared with those of the Pacific region. The regional means for importance, progress, and the gap between them for each need area were subtracted from those of the entity. This was done to find out by how much the entity's means are above or below the regional means. Trends in rankings for importance, progress and needs for need areas were displayed to show similarities and differences in educational issues that exist between the entity and the Pacific region. These differences need to be addressed. Results for American Samoa are as follows:

Table 8. Difference in Mean Ratings for Importance, Progress, and Need
American Samoa and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management and Planning | - 0.31 | - 0.20 | - 0.06 |
| Community, Partnerships | - 0.20 | - 0.11 | - 0.09 |
| Small Rural Schools | - 0.23 | - 0.04 | - 0.15 |
| At-Risk Youth | - 0.11 | - 0.01 | - 0.09 |
| Curriculum and Instruction | - 0.16 | 0.20 | - 0.35 |
| Professional Development | - 0.09 | 0.00 | - 0.08 |
| Resource and Information Acquisition | 0.02 | - 0.46 | 0.53 |
| Systemic Reform | - 0.15 | - 0.19 | 0.06 |
| Use of Technology | - 0.02 | - 0.22 | 0.23 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

As shown in Table 8, ratings of importance for American Samoa are slightly lower than the regional means, except for *resource and information acquisition.* However, trends in rankings of importance for all need areas are similar in American Samoa and the Pacific region (see Figure 2).

Ratings for progress in seven need areas for this entity were below the regional means. Ratings for progress in need areas, *curriculum and instruction* and *professional development*, are equal to, or slightly higher than regional averages. However, the differences in mean ratings between American Samoa and the Pacific region were less than 0.5. The trends in rankings of progress for need areas for American Samoa and the Pacific region are similar (see Figure 3).

In Table 8, the means of needs, gaps in ratings for importance and progress in three need areas for this entity are larger than the regional averages. These areas are *resource and information acquisition*, *use of technology*, and *systemic reform*. In the remaining six need areas, the gaps are smaller than regional averages. However, the difference in mean ratings for *resource and information acquisition* between American Samoa and the whole Pacific region was 0.53, which was relatively large compared to other need areas. The trends in rankings of needs for American Samoa and the region are similar, except for *curriculum and instruction*, which was perceived as the least need area in the entity (see Figure 4).

*Figure 2*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

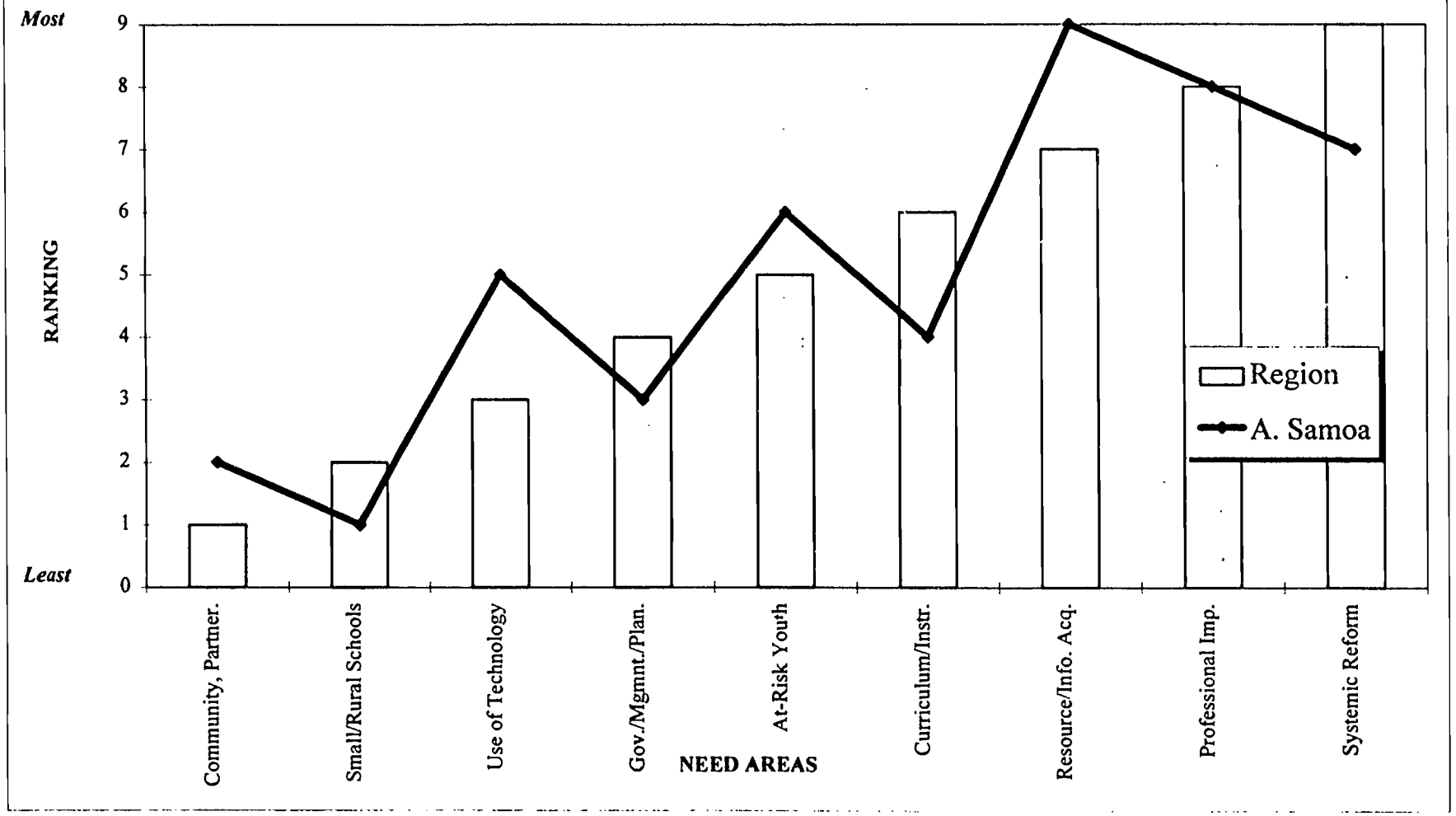


*Figure 3*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

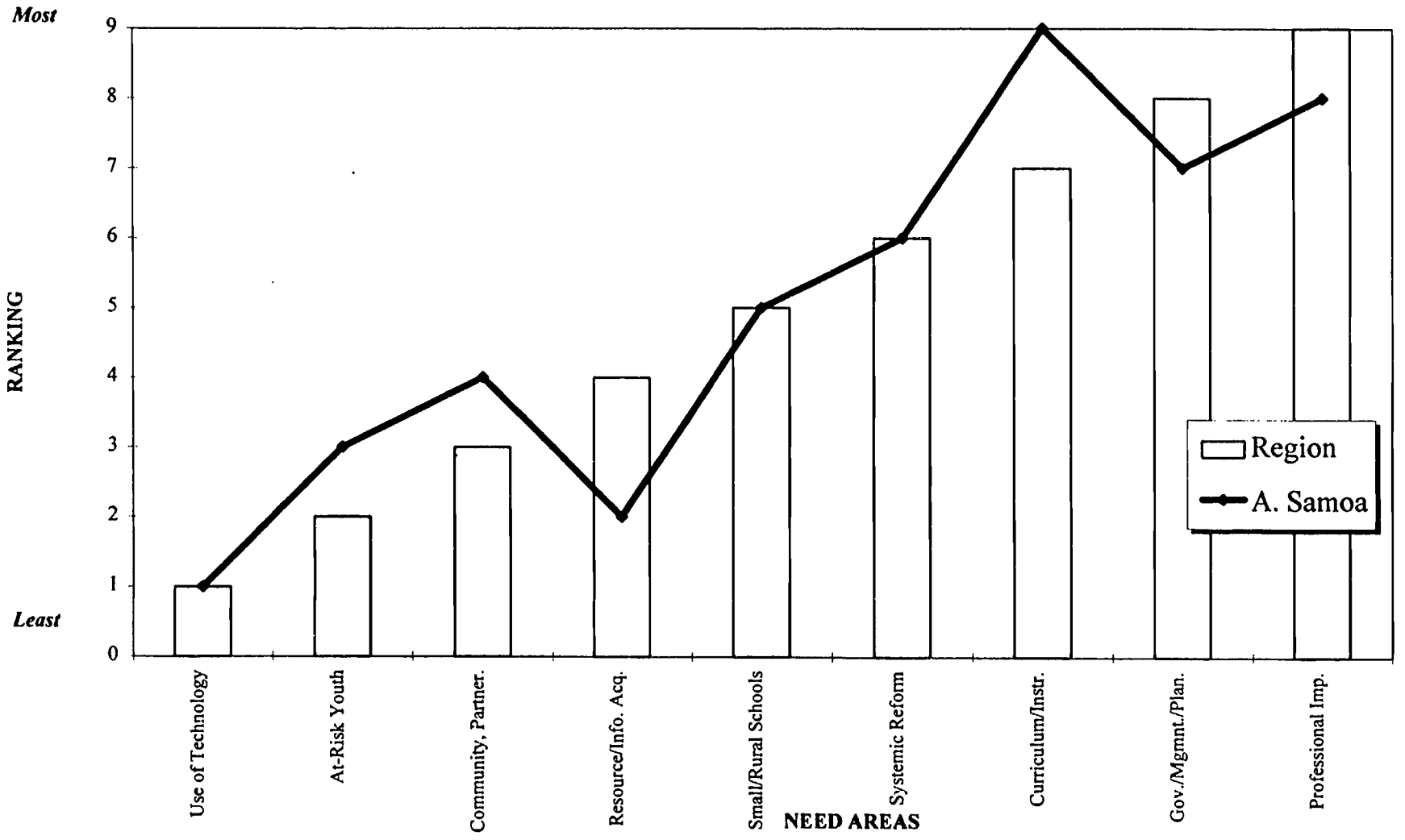
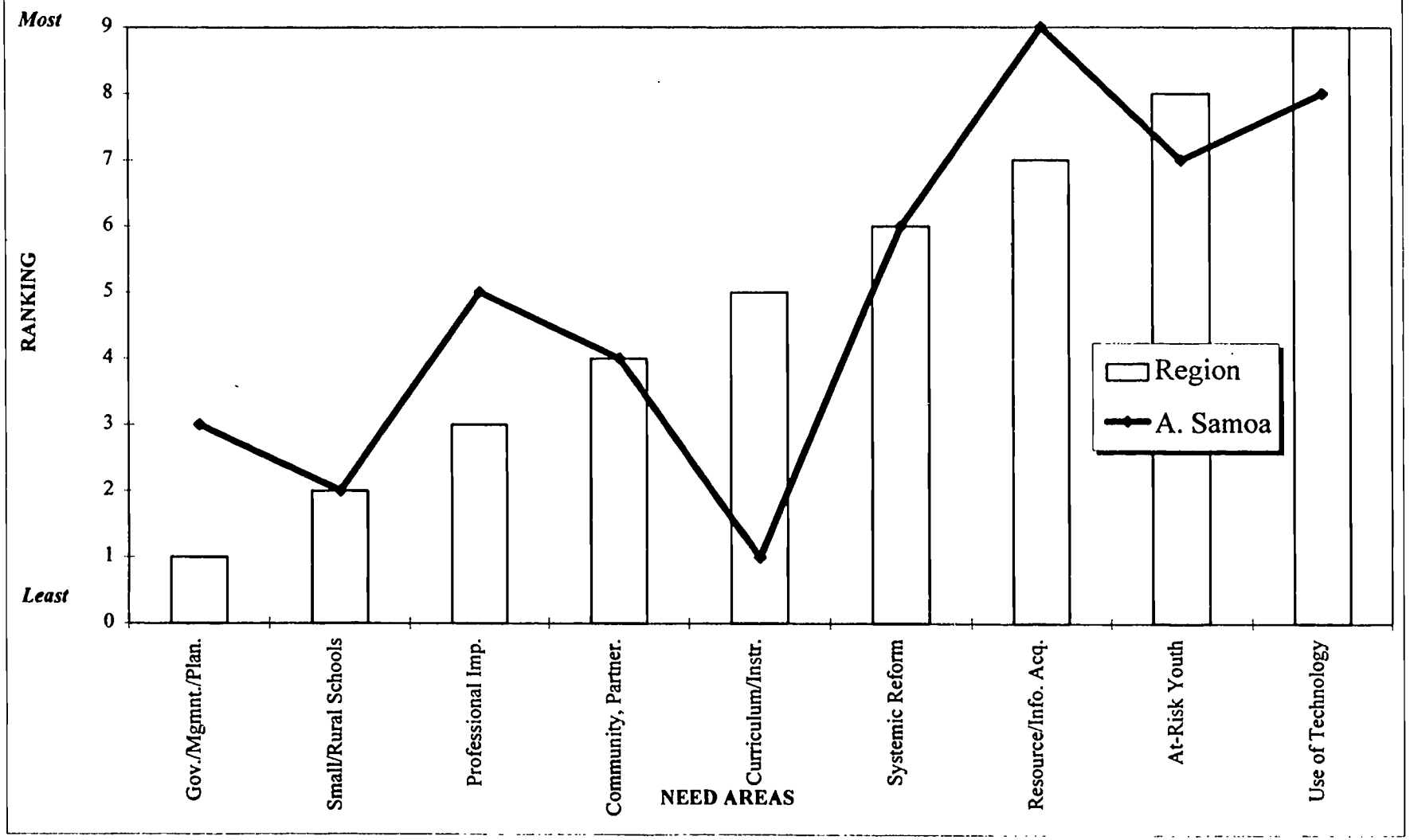


*Figure 4*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



## CHUUK STATE
FEDERATED STATES OF MICRONESIA

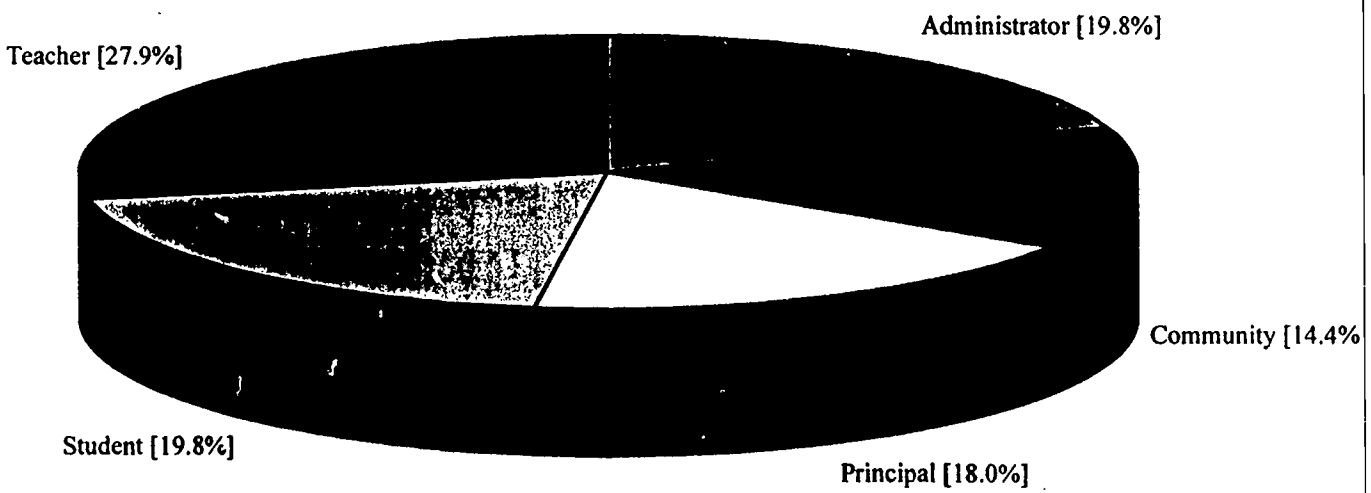
The Federated States of Micronesia (FSM) consists of four states: Chuuk (Truk), Kosrae, Pohnpei, and Yap. The entities were formerly part of the Trust Territory of the Pacific Islands. The FSM is now a semi-independent nation under a compact of free association with the United States. It receives financial benefits in return for exclusive free passage of U.S. military vessels. The FSM compact will be up for renewal in the year 2001.

Chuuk State comprises the volcanic island in the Chuuk Lagoon and some 24 outer-island atolls--in all over 290 islands. Chuuk is the most populous of the FSM states, with 50,514 people (est. 1995) and an area of 44.8 square miles. Its economy is derived from fishing, agriculture, and a small tourist trade. There are 98 public schools with a total of 17,650 students and 1,177 teachers in Chuuk State (1994). The distribution of respondents from Chuuk State is shown in Figure 5.

***Figure 5***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*Chuuk*




**N = 111**

***Which of the nine educational need areas respondents in Chuuk view as the most important ?***

Table 9. Mean Ratings for Importance of Nine Need Areas in Chuuk

| Need Area | Importance |
|---|---|
| Governance, Management and Planning | 6.04 |
| Professional Development | 5.95 |
| Resource and Information Acquisition | 5.93 |
| Systemic Reform | 5.90 |
| Curriculum and Instruction | 5.87 |
| Use of Technology | 5.84 |
| At-Risk Youth | 5.84 |
| Small Rural Schools | 5.82 |
| Community, Partnerships | 5.72 |

Results presented in Table 9 indicate that *governance, management, and planning*, *professional development,* and *resource and information acquisition* are the most important need areas in Chuuk. *Community and partnerships*, *small rural schools* and *at-risk youth* are the least important. However, in a scale of 1 to 7, ratings for eight need areas were below 6.0 and the difference between the lowest and the highest rating was only 0.32.

***In which of the nine educational need areas respondents in Chuuk view progress?***

Table 10. Mean Ratings for Progress of Nine Need Areas in Chuuk

| Need Area | Progress |
|---|---|
| Governance, Management, and Planning | 4.00 |
| Professional Development | 3.80 |
| Curriculum and Instruction | 3.70 |
| Small Rural Schools | 3.61 |
| Resource and Information Acquisition | 3.58 |
| Community, Partnerships | 3.56 |
| Systemic Reform | 3.56 |
| At-Risk Youth | 3.37 |
| Use of Technology | 2.66 |

Data presented in Table 10 indicate that *governance, management, and planning, professional development,* and *curriculum and instruction* show the most progress in Chuuk. *Use of technology, at-risk youth systemic reform,* and *community and partnerships* show the least progress. Means of all progress were only at, or below 4.0. However, the difference between the lowest and the highest rating was as high as 1.34.

***In which need areas is the gap between the importance of a need area and its progress the largest in Chuuk?***

Table 11. Mean Ratings for Need of Nine Need Areas in Chuuk

| Need Area | Need |
|---|---|
| Use of Technology | 3.18 |
| At-Risk Youth | 2.46 |
| Resource and Information Acquisition | 2.35 |
| Systemic Reform | 2.34 |
| Small Rural Schools | 2.21 |
| Community, Partnerships | 2.17 |
| Curriculum and Instruction | 2.16 |
| Professional Development | 2.15 |
| Governance, Management, and Planning | 2.03 |

If it is assumed that the discrepancy between *importance* and *progress* can be regarded as *need,* the *use of technology* and *at-risk youth,* and *resource and information acquisition* are the most needed educational issues in Chuuk (see Table 11). *Governance, management, and planning; professional development,* and *curriculum and instruction* are the least needed. Because *use of technology, at-risk youth and resource* and *information acquisition* were rated as "somewhat important" and " least progress", these needs are priorities in Chuuk.

***What is the difference in importance, progress, and needs between Chuuk and the Pacific region?***

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the whole Pacific region. The regional means for importance, progress, and the gap between them for each need area were subtracted from those of the entity to see by how much the entity's means are above or below the regional means. The trends in rankings for importance, progress and needs for need areas were displayed to show similarities and differences between the entity and the Pacific region in educational issues that need to be addressed. Results for Chuuk are as follows:

Table 12. Difference in Mean Ratings for Importance, Progress, and Need Chuuk and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | - 0.13 | 0.10 | - 0.26 |
| Community, Partnerships | - 0.24 | - 0.01 | - 0.21 |
| Small Rural Schools | - 0.16 | - 0.01 | - 0.14 |
| At-Risk Youth | - 0.37 | - 0.05 | - 0.34 |
| Curriculum and Instruction | - 0.35 | - 0.12 | - 0.24 |
| Professional Development | - 0.32 | - 0.11 | - 0.22 |
| Resource and Information Acquisition | - 0.33 | 0.00 | - 0.32 |
| Systemic Reform | - 0.37 | - 0.22 | - 0.15 |
| Use of Technology | - 0.27 | - 0.61 | 0.35 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

Data presented in Table 12 show that ratings for importance in all need areas in Chuuk are slightly lower than the regional means (see Figure 6). Trends in rankings of importance for need areas in Chuuk were similar to those of the region, except *governance, management, and planning,* which was perceived as the highest ranking need area.

Rating for *governance, management, and planning* in Chuuk is higher than the regional average. Ratings for progress in the remaining eight need areas are equal to, or lower than regional averages (see Figure 7). Trends in rankings of progress in Chuuk and the region were similar.

The need in *use of technology* in Chuuk is slightly higher than the regional mean. In the other eight need areas, the means are slightly smaller than regional averages (see Figure 8). The trends in rankings of needs in Chuuk and the Pacific region were similar.

*Figure 6*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

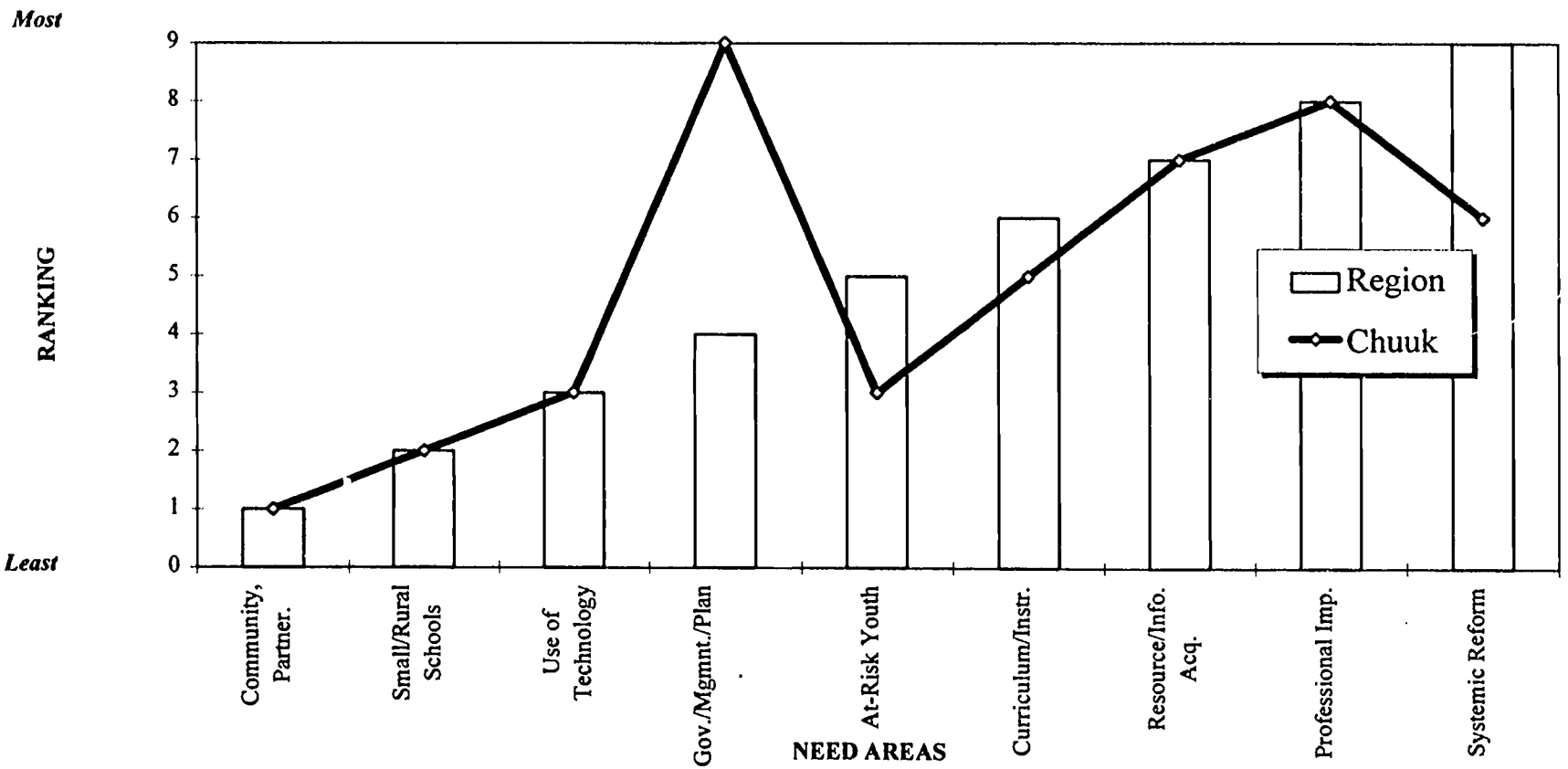


*Figure 7*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

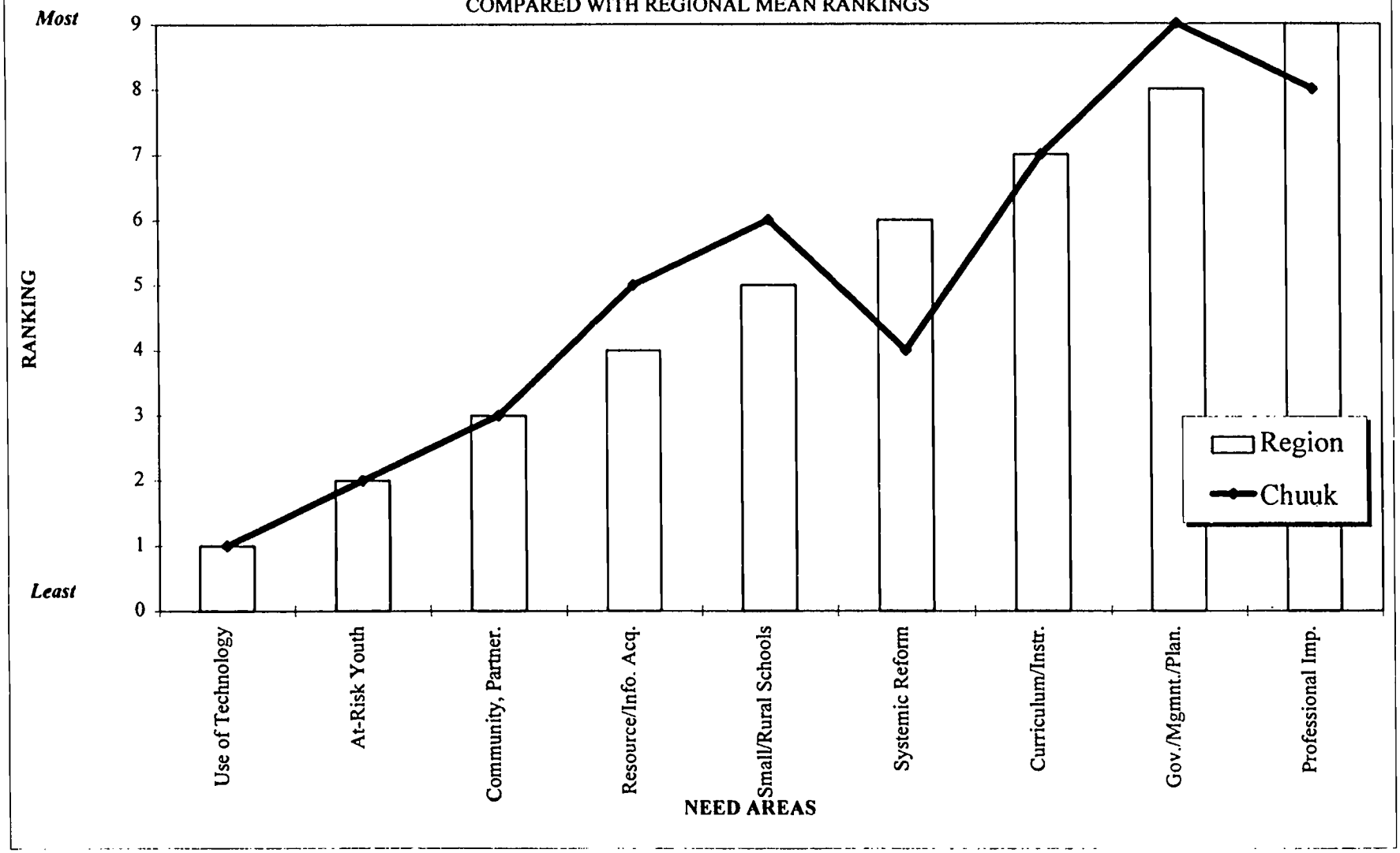
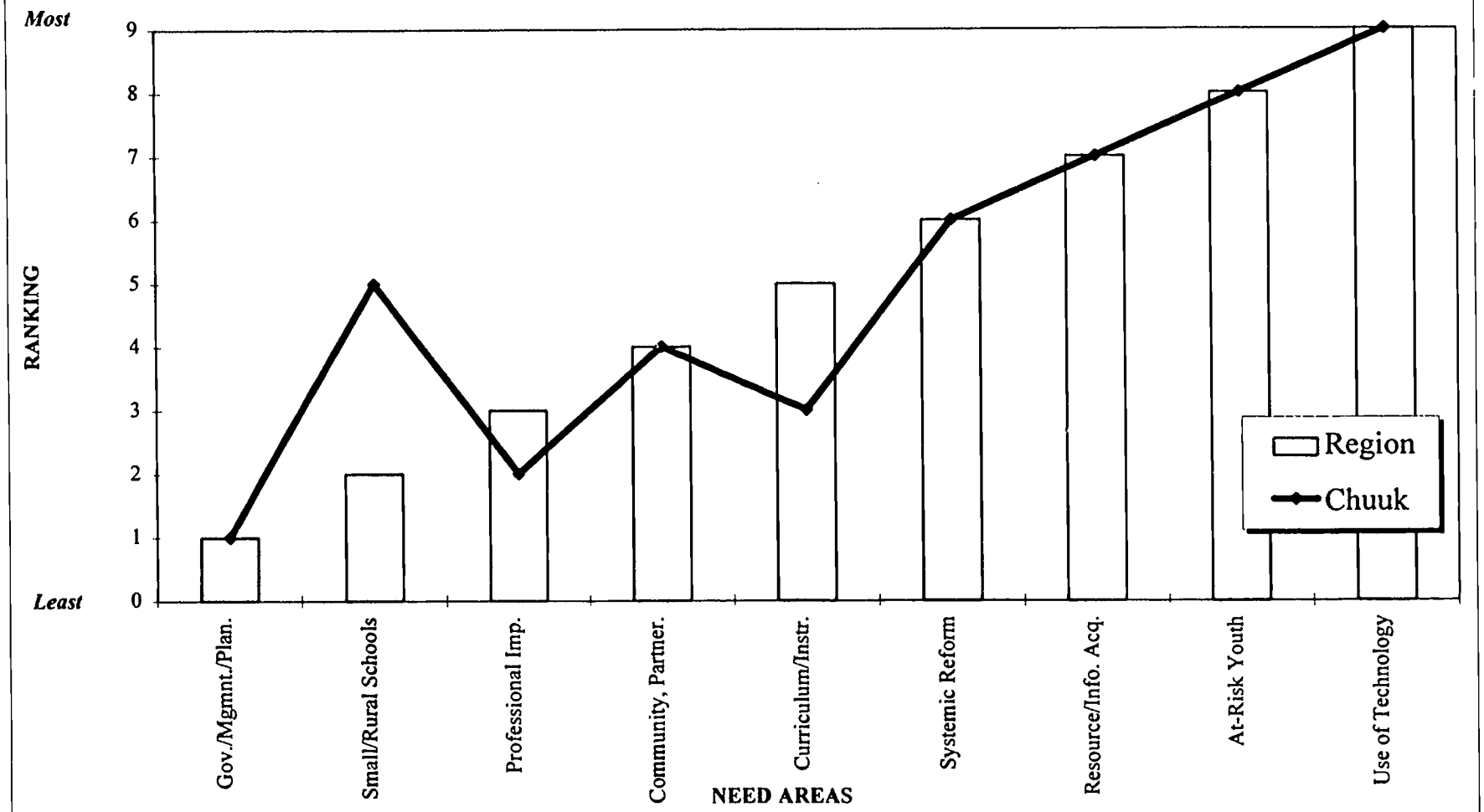


*Figure 8*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



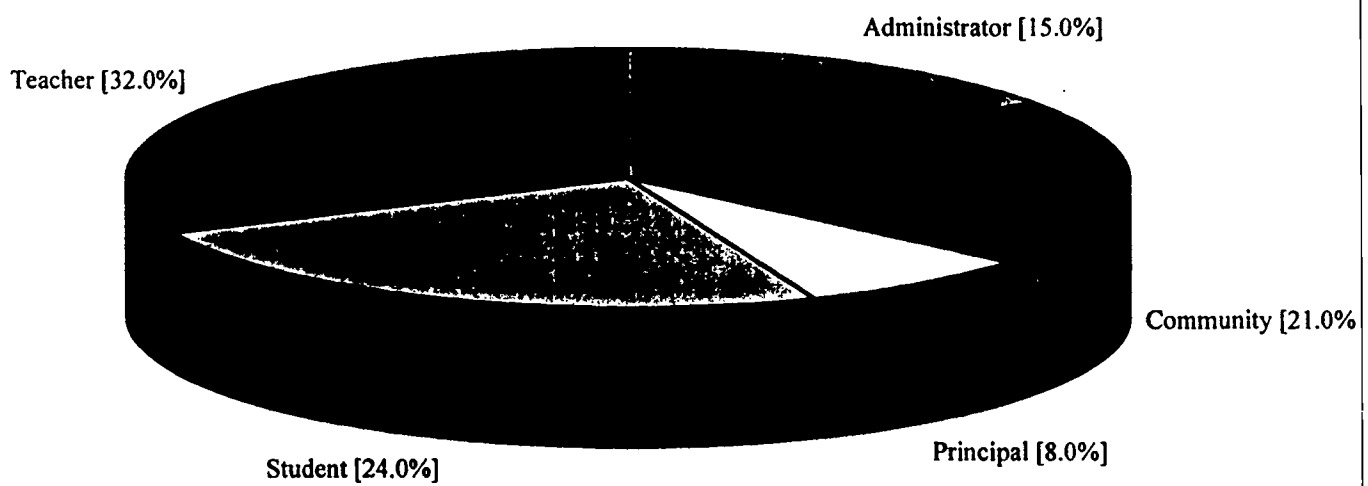
## COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

The Commonwealth of the Northern Mariana Islands (CNMI) forms a chain of 17 volcanic islands, stretching over 375 miles north to south, with a land area of 181 square miles. There are six inhabited islands, but most of the CNMI's 78,753 people (est.1995) live on Saipan. The CNMI was formerly a part of the Trust Territory of the Pacific Islands; however, its people chose in the 1970s to form closer ties with the United States and become a commonwealth. CNMI is a permanen part of the United States, and its people are U.S. citizens. Tourism is a major industry and manufacturing is growing rapidly. There are 10 public schools on three islands with a total of 7,710 students and 415 teachers in the CNMI (1994). The distribution of respondents from CNMI is shown in Figure 9.

***Figure 9***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*CNMI*




**N = 100**

***Which of the nine educational need areas, respondents in the CNMI view as the most important ?***

Table 13. Mean Ratings for Importance in Nine Need Areas in CNMI

| Need Area | Importance |
|---|---|
| Systemic Reform | 6.52 |
| Professional Development | 6.44 |
| Resource and Information Acquisition | 6.35 |
| Curriculum and Instruction | 6.34 |
| At-Risk Youth | 6.32 |
| Use of technology | 6.30 |
| Governance, Management, and Planning | 6.28 |
| Community, Partnerships | 6.10 |
| Small Rural Schools | 6.05 |

As presented in Table 13, *systemic reform*, *professional development*, and *resource and information acquisition* are the most important need areas in CNMI. *Small rural schools*, *community partnerships* and *governance, management, and planning* are the least important. Data may reflect teacher and student concerns because more than 56 percent of respondents were teachers and students. The high ratings in importance for *systemic reform*, *professional development* and *resource and information acquisition* indicate CNMI's educational priorities.

*In which of the nine educational need areas respondents in CNMI view progress?*

Table 14. Mean Ratings for Progress in Nine Need Areas in CNMI

| Need Area | Progress |
|---|---|
| Systemic reform | 4.22 |
| Professional Development | 4.20 |
| Curriculum and Instruction | 4.16 |
| Small Rural Schools | 4.10 |
| Governance, Management, and Planning | 4.10 |
| Community, Partnership | 4.04 |
| Resource and Information Acquisition | 3.89 |
| Use of Technology | 3.77 |
| At-Risk Youth | 3.72 |

As presented in Table 14, *systemic reform*, *professional development* and *curriculum and instruction* showed the most progress. *At-risk youth, use of technology* and *resource and information acquisition* showed the least progress. The difference in ratings between most and least progress is only 0.5. In addition, the ratings of progress for all need areas are equal to, or below 4.22, which falls just above the midpoint on the rating scale of 1 to 7.

***In which need areas is the gap between the importance of a need area and its progress the largest in CNMI?***

Table 15. Mean Ratings for Need of Nine Need Areas in CNMI

| Need Area | Need |
|---|---|
| At-Risk Youth | 2.60 |
| Use of Technology | 2.51 |
| Resource and Information Acquisition | 2.46 |
| Systemic Reform | 2.28 |
| Professional Development | 2.23 |
| Governance, Management, and Planning | 2.20 |
| Curriculum and Instruction | 2.19 |
| Community, Partnerships | 2.06 |
| Small Rural Schools | 1.95 |

It is assumed that the discrepancy between *importance* and *progress* can be regarded as *need*. This means that *at-risk youth, use of technology,* and *resource and information acquisition* are the most needed educational issues in CNMI. *Small rural schools, community, partnerships* and *curriculum and instruction* are least needed. Technology and econonic growth, as well as the social aspects of multicultural backgrounds, can have side effects. This seemed the case in CNMI. Schools are experiencing problems with at-risks students--crisis identity, teen pregnancies, academic failures (bordering on dropout), drug and alcohol abuse, personal crises, suicides, and others. Because teachers are confronted with these student problems and the majority of respondents are teachers and students, these problems were reflected in the data.

Basically, acquisition of *resource and information* depends on availability of technology. Therefore, *resource and information acquisition* and *use of technology* were the highest ranked need areas in CNMI.

***What is the difference in importance, progress, and needs between CNMI and the Pacific region?***

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the Pacific region as a whole. The regional means for importance, progress, and the gap between them for each need area were subtracted from those of the entity to see whether the entity's means are above or below regional means. Trends in rankings for importance, progress and needs were displayed to show similarities and differences in educational issues between the entity and the Pacific region. Results for CNMI are as follows:

Table 16. Difference in Mean Ratings for Importance, Progress, and Need in CNMI and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | 0.11 | 0.20 | - 0.09 |
| Community, Partnerships | 0.14 | 0.47 | - 0.32 |
| Small Rural Schools | 0.07 | 0.48 | - 0.40 |
| At-Risk Youth | 0.11 | 0.30 | - 0.20 |
| Curriculum and Instruction | 0.12 | 0.34 | - 0.21 |
| Professional Development | 0.17 | 0.29 | - 0.14 |
| Resource and Information Acquisition | 0.09 | 0.31 | - 0.21 |
| Systemic Reform | 0.25 | 0.44 | - .021 |
| Use of Technology | 0.19 | 0.50 | - 0.32 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

Data in Table 16 show that ratings in importance for need areas in CNMI are slightly higher then the regional averages (see Figure 10). Trends in rankings of importance in CNMI and the region were similar.

As shown in Table 16, ratings for progress in all nine need areas in CNMI are higher than regional averages (see Figure 11). Trends in rankings for progress in CNMI and the region were similar, except for *systemic reform,* which was perceived as experiencing the most progress.

Table 16 also shows that the needs--the gaps in ratings between importance and progress --for CNMI are lower than regional averages (see Figure 12). Trends in rankings of need in CNMI and the region were similar, except *small rural school,* which was perceived as the least need.

*Figure 10*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

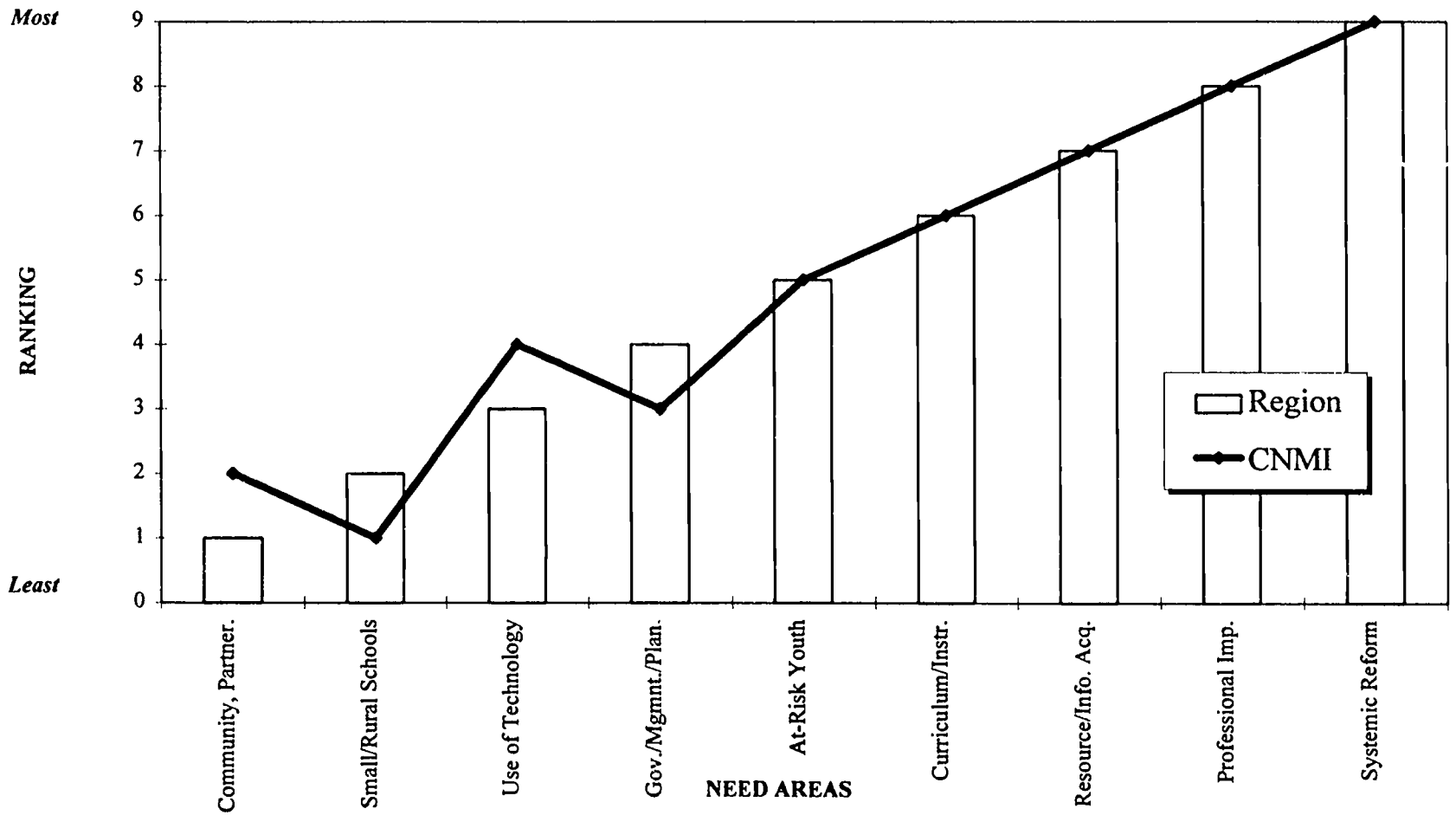


*Figure 11*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

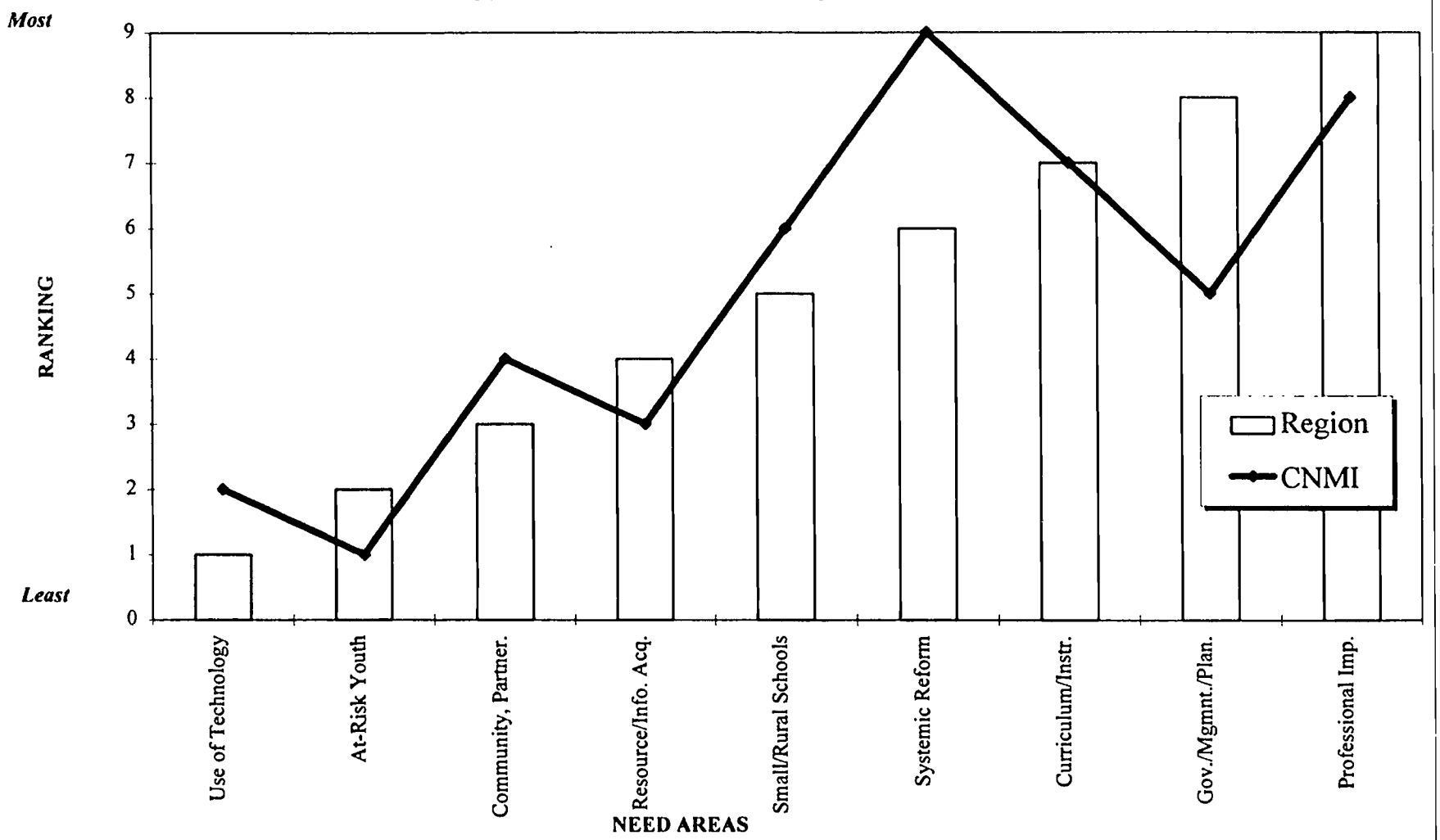
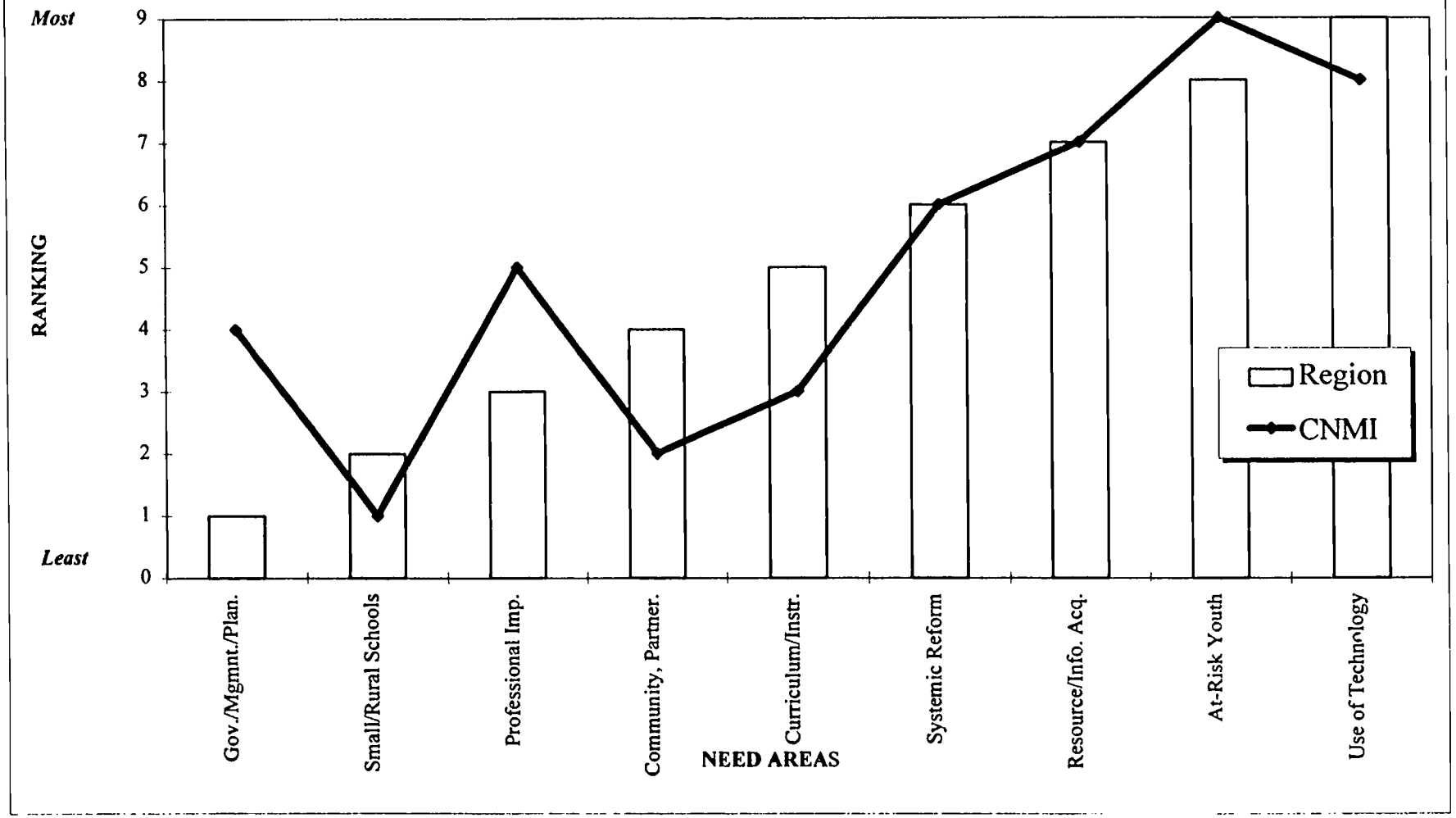


*Figure 12*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



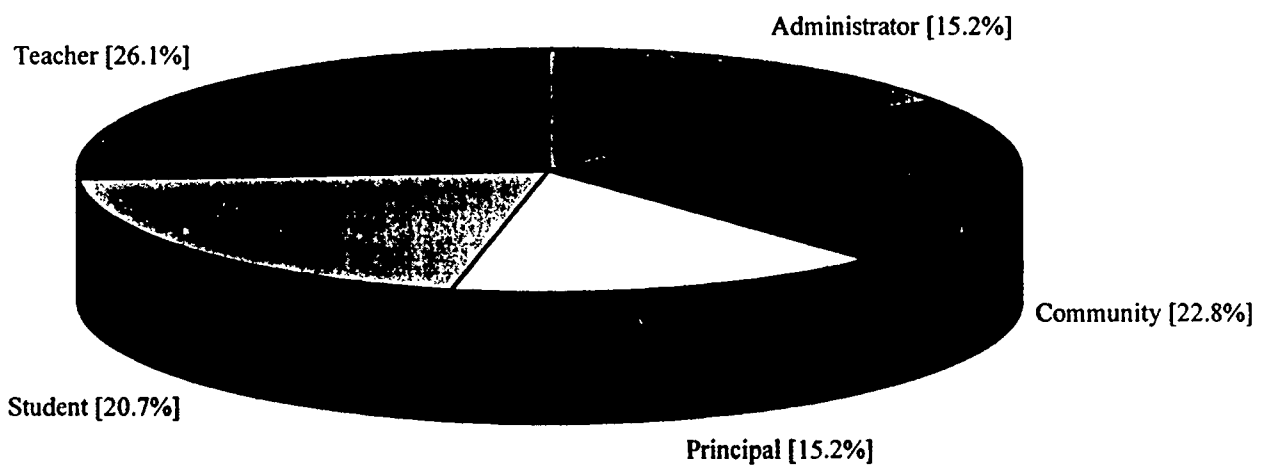
## GUAM

Guam is the largest Micronesian island, with a land area of 212 square miles and 144,694 people (est. 1995). Formed by the union of two volcanoes, northern Guam is a flat limestone plateau while the southern part is mountainous. Guam's population is highly diverse, with residents from throughout Asia and the Pacific as well as a substantial number of U.S. military personnel and their dependents. As an unincorporated territory of the United States, Guam's people hold U.S. citizenship and are free to immigrate to the United States. Tourism, especially from Japan, is the major private industry. Guam's strong economy and job market attract many immigrants from the Philippines and Micronesia. There are 35 public schools with a total of 30,417 students and 1,822 teachers in Guam (1994). The distribution of respondents from Guam enrolled in this assessment is shown in Figure 13.

***Figure 13***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*Guam*




**N = 92**

***Which of the nine educational areas respondents in Guam view as the most important ?***

Table 17. Mean Ratings for Importance of Nine Need Areas in Guam

| Need Area | Importance |
|---|---|
| At-Risk Youth | 6.41 |
| Systemic Reform | 6.31 |
| Resource and Information Acquisition | 6.30 |
| Professional Development | 6.26 |
| Curriculum and Instruction | 6.22 |
| Use of Technology | 6.07 |
| Governance, Management, and Planning | 6.03 |
| Community, Partnerships | 5.90 |
| Small Rural Schools | 5.54 |

As shown in Table 17, *at-risk youth*, *systemic reform*, and *resource and information acquisition* are the most important need areas. *Small rural schools*, *community and partnerships*, and *governance, management, and planning* are least important. Except for *small rural schools* and *community, partnerships,* ratings for other need areas were above 6 on a scale of 1 to 7. Because approximately 80 percent of respondents were from the educational system (see Figure 13) and because of the current situation with at-risk youth in Guam, this need area received a high rating in importance.

***In which of the nine educational need areas respondents in Guam view progress ?***

Table 18. Mean Ratings for Progress of Nine Need Areas in Guam

| Need Area | Progress |
|---|---|
| Systemic Reform | 4.42 |
| Professional Development | 4.29 |
| Curriculum and Instruction | 4.08 |
| Use of Technology | 4.01 |
| Governance, Management, and Planning | 4.01 |
| Small Rural Schools | 4.00 |
| Community, Partnerships | 3.98 |
| Resource and Information Acquisition | 3.76 |
| At-Risk Youth | 3.75 |

As shown in Table 18, *systemic reform, professional development* and *curriculum and instruction* displayed the most progress. *At-risk youth, resource and information acquisition,* and *community, partnerships* showed the least progress. The difference between the most and least progress is 0.67.

***In which need areas is the gap between the importance of a need area and its progress the largest in Guam?***

Table 19. Mean Ratings for Need of Nine Need Areas in Guam

| Need Area | Need |
|---|---|
| At-Risk Youth | 2.67 |
| Resource and Information Acquisition | 2.53 |
| Curriculum and Instruction | 2.12 |
| Use of Technology | 2.07 |
| Governance, Management, and Planning | 2.02 |
| Professional development | 1.96 |
| Community, Partnerships | 1.96 |
| Systemic Reform | 1.91 |
| Small Rural Schools | 1.50 |

It is assumed that the discrepancy between *importance* and *progress* can be regarded as *need.* As reported in Table 19, in Guam, the most need areas were *at-risk youth, resource and information acquisition,* and *curriculum and instruction.* The least need areas were *small rural schools, systemic reform, community and partnerships,* and *professional development.* The difference between the most and least need areas is 1.17. Rating for the most need area is almost twice as high as the least need area. This high rating strongly supports the ranking of *at-risk youth* as the educational issue requiring the most attention in Guam.

***What is the difference in importance, progress, and needs between Guam and the Pacific region?***

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with the Pacific region. The regional means for importance, progress, and the gap between them for each need area were subtracted from those of the entity to see how much the entity's means are different from the regional means. Trends in rankings for importance, progress and needs were displayed to show similarities and differences in educational issues between Guam and the Pacific region. Results for Guam were as follows:

Table 20. Difference in Mean Ratings for Importance, Progress, and Need in Guam and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | - 0.14 | 0.11 | - 0.27 |
| Community, Partnerships | - 0.06 | 0.41 | - 0.42 |
| Small Rural Schools | - 0.44 | 0.38 | - 0.85 |
| At-Risk Youth | 0.20 | 0.33 | - 0.13 |
| Curriculum and Instruction | 0.00 | 0.26 | - 0.28 |
| Professional Development | - 0.01 | 0.38 | - 0.41 |
| Resource and Information Acquisition | 0.04 | 0.18 | - 0.14 |
| Systemic Reform | 0.04 | 0.64 | - 0.58 |
| Use of Technology | - 0.04 | 0.74 | - 0.76 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

As presented in Table 20, ratings in importance of *at-risk youth, systemic reform, resource and information acquisition, curriculum and instruction,* are equal to, or slightly higher in Guam than the regional means. Ratings in importance for the other five need areas are slightly lower than the regional means (see Figure 14). Trends in ranking of importance in Guam and the region were similar. However, *at-risk youth* was considered the most important educational issue in Guam; it is ranked fifth in the Pacific region.

Ratings for progress in all nine need areas for Guam are higher than regional averages. The ratings for progress of need areas, *use of technology* and *systemic reform,* are considerably higher than the regional means (see Figure 15). The trends in rankings for progress in the need areas in Guam were slightly different than ratings for the region. *Systemic reform,* in respondents' view, showed the most progress in Guam.

Table 20 also shows that the needs--gaps in ratings between importance and progress--in all need areas for Guam are lower than regional averages. The means of need areas for *small*

*rural schools* and *use of technology* are considerably lower in Guam than in the rest of the region. Trends in rankings of needs in Guam were slightly different than the region's rankings (see Figure 16); *at-risk youth* was seen as the area the most in need of improvement.

*Figure 14*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

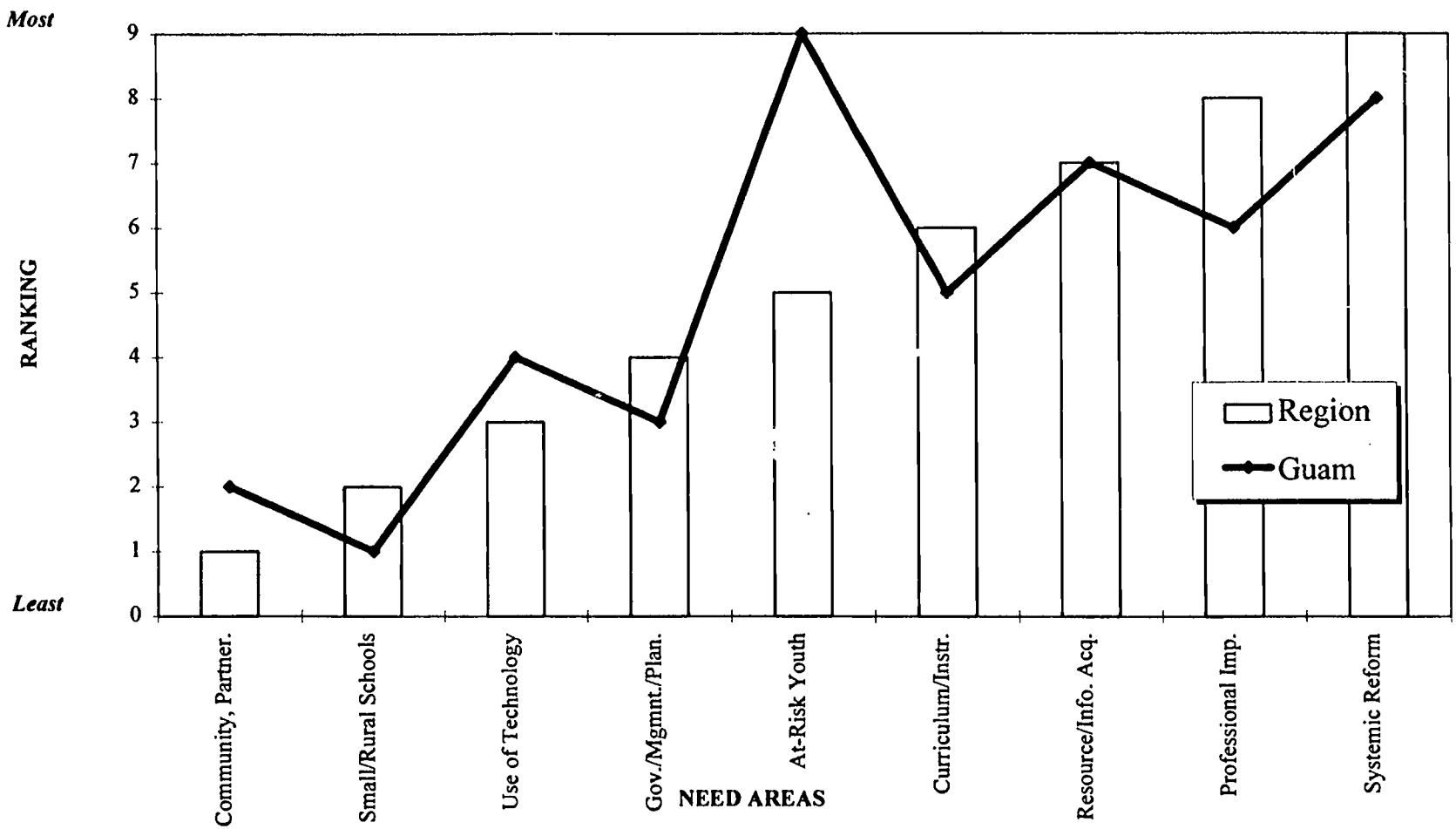


*Figure 15*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

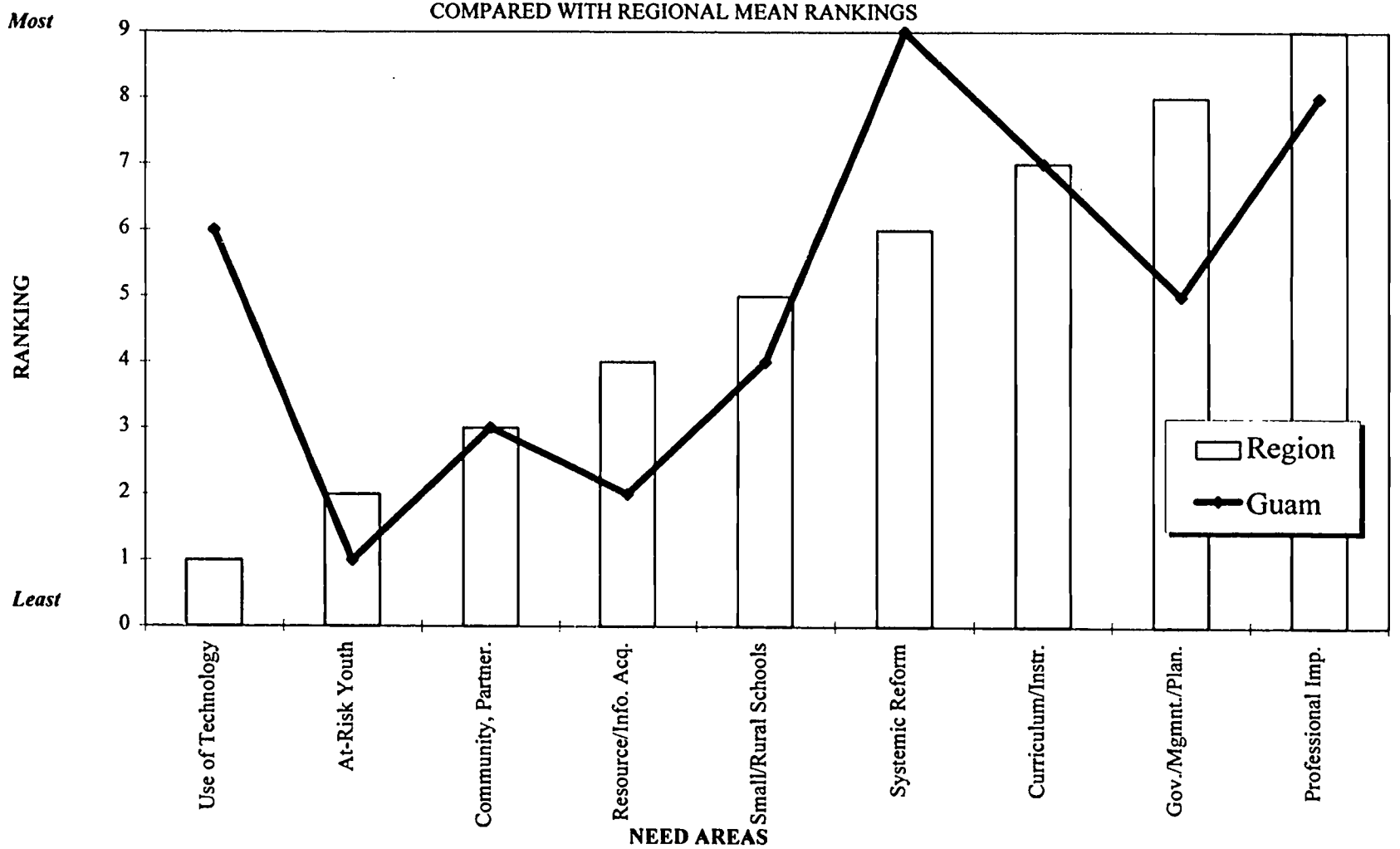
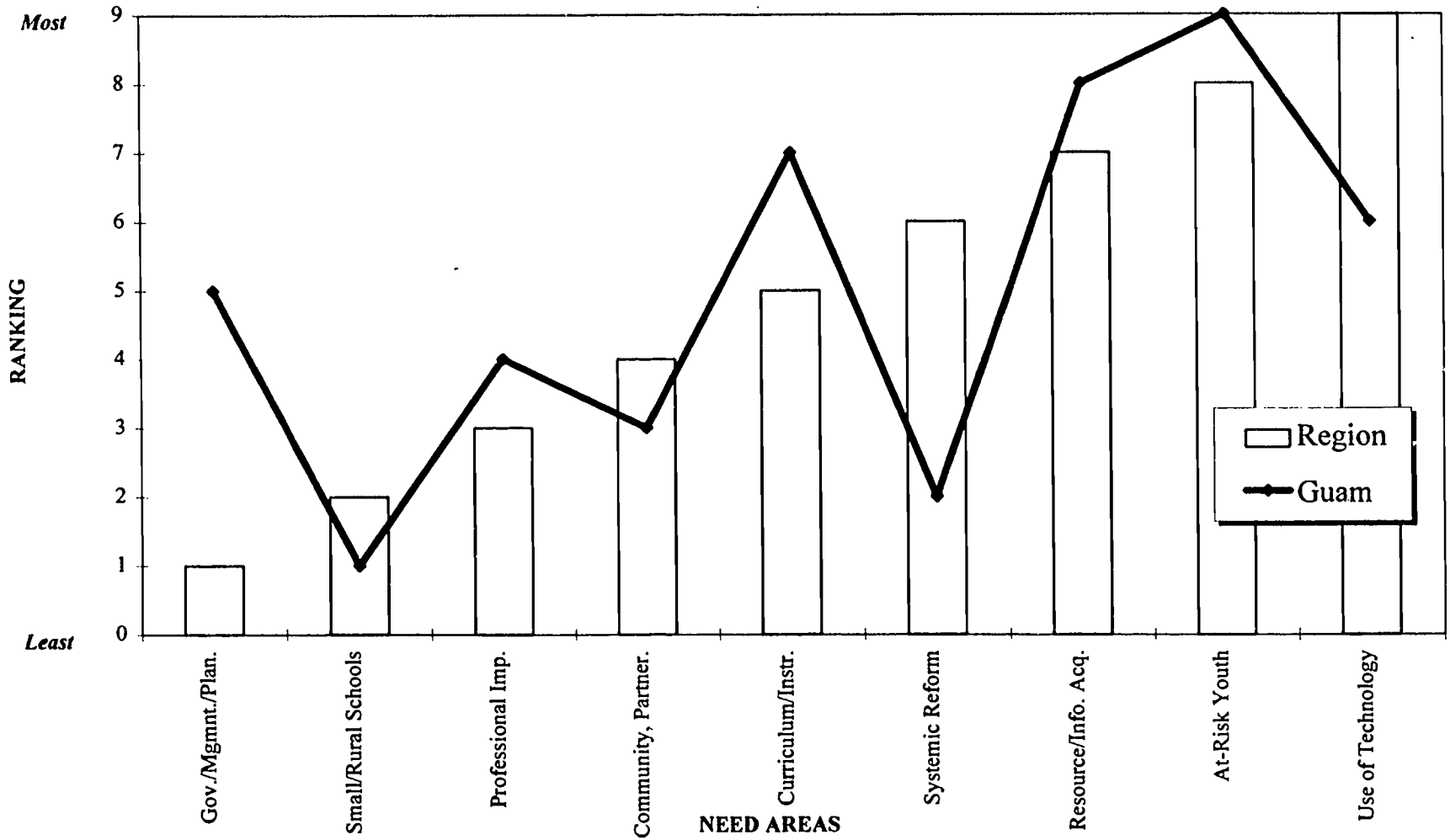


*Figure 16*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



## HAWAI'I

Hawai'i, the Pacific island U.S. state, is the largest and most populous jurisdiction in the PREL region, with 1,148,430 people (est.1995). The volcanic Hawaiian Islands, 2,400 miles from the West Coast of the U.S., are the center of Pacific trade, commerce, and industry. Hawai'i's population is highly diverse; indigenous Pacific islanders constitute only a small percentage of its residents. There are 240 public schools with a total of 179,876 students and 11,445 teachers in the State of Hawai'i. Due to the diversity of population with special needs, the needs assessment in educational issues for the state of Hawai'i focuses on the Native Hawaiian students
( Part I ) and the overall educational issues in the state of Hawai'i ( Part II ).

### Part I: Educational Issues for Native Hawaiian Students Enrolled in Public Schools

According to the State of Hawai'i's Department of Education, 23.4 percent of the total DOE enrollment was identified as Hawaiian in the 1992-1993 school year. Data are shown in Table 21.

Table 21. Ethnic Distribution of Students Enrollment for 1992 - 1993 School Year in Hawai'i

| Ethnicity | Number | Percent |
|---|---|---|
| Hawaiian | 41,477 | 23.4 |
| Caucasian | 38,025 | 21.5 |
| Filipino | 31,945 | 18.0 |
| Japanese | 23,313 | 13.2 |
| Chinese | 5,659 | 3.2 |
| Other | 36,690 | 20.7 |
| Total Enrollment | 177,109 | 100 |

Source: State of Hawai'i Department of Education.
Note: Other included African American, Hispanic, Korean, Other, and Samoa.

As shown in Table 21, the Hawai'i student population was the largest ethnic group enrolled in public schools in the state of Hawai'i during the 1992-1993 school year. The enrollment of Hawaiian students in the state of Hawai'i Department of Education's schools is expected to increase because of higher birth rate in Hawaiian families.

*Educational Needs of Native Hawaiian students.*

As previously mentioned, a "need" is a gap between desired performance and actual performance. A need is a value judgment that is made to identify a problem area that can be analyzed and solved. Although there is no established magnitude to indicate the desired or actual performance, inductive methods can be used in this assessment to determine needs. It is assumed that goals defined as "desired performance," and problems that fractionated students attach to these goals represent "actual performance." Needs are solutions to these problems.

The Native Hawaiian Educational Assessment (NHEA) (1993) has identified six goals (desired performance) for Native Hawaiians to be achieved by the year 2000. Those goals are:

1. All children will start school ready and eager to learn.

2. Students will demonstrate competency in the basic skills of English and mathematics and in other challenging subject matter including science and social science.

3. The high school graduation rate will increase while dropout and absenteeism rates will drop.

4. Adult literacy rates, along with college enrollment and completion rates, will increase.

5. Schools will offer a nurturing yet disciplined environment conducive to learning.

6. Students will develop a respect for, and understanding of their own and other's cultures.

***What are the major problems in educational issues among Native Hawaiian students ?***

According to NHEA (1993), five major educational issues have been defined as problems for Native Hawaiian students in Hawai'i. Obstacles to the six goals previously listed are :

1. Ethnic Hawaiian students are the largest single group that is characterized as unprepared to start school.

2. Hawaiian students score consistently lower than other ethnic groups in all achievement tests across all grade levels.

3. Absence and retention rates for Hawaiian students are higher than the three other major ethnic groups in the state.

4. Compared to the three other major ethnic groups in the state, Hawaiians have the lowest overall pattern of literacy skills and low rates of college completion.

5. Overall, 32.7 percent of Hawaiian students enrolled in DOE's schools were in the special education programs, and a higher percentage of Hawaiians were reportedly involved in substance abuse, violence, and crime.

***What are the needs for Hawaiian students to improve their academic performance?***

Because services were inadequate and corrective programming is possible, there is a defined need. According to NHEA (1993) assessment, Hawaiians needed to increase the educational level of community, and students needed to improve academic performance and achievement. The solutions can be restructured into the following six need areas that should be recommended as priorities in educational issues for Hawaiians:

1. Increase awareness of community involvement in educational issues.

2. Expand early educational programs and preschool programs for Hawaiian children.

3. Increase group support for retention of students in higher education.

4. Focus community efforts on literacy needs.

5. Enforce a positive environment for learning and increase services for students with special needs.

6. Increase opportunities and resources for cultural learning.

**Part II: What Are the Most Needed Educational Issues for the State of Hawai'i ?**

Part II of this assessment included Hawaiians, but the focus was on educational needs for the state of Hawai'i as a whole. The data used for this assessment included the Hawai'i Opinion Poll on Public Education (DOE, 1991), and the literature review (PREL, 1995).

***What does the public view as the biggest issues for public education in the state of Hawai'i ?***

It is assumed that the media cover major issues of public concern. Newspapers and publications that serve the community tend to be good sources of information for needs assessment data. Based on this assumption, a literature review of seven major newspapers published in Hawai'i was done in 1994. The seven newspapers were the Honolulu Advertiser, Honolulu Star-Bulletin, Maui News, West Hawai'i Today, Hawai'i Tribune-Herald, Garden Island and Midweek. More than 2,950 articles were associated with educational issues in Hawai'i. The articles (see Table 22) were categorized according to content and tabulated in Table 22. An example of the procedure used to classify the articles follows:

*Governance, Management, and Planning:*
"Aizawa outlines his agenda - Schools superintendent makes literacy his top priority." Ka Nupepa, Oct. 24, 1994; p3.

*Community, Partnership:*
"Foodland and Pepsi enhance education." The Garden Island, Oct.18, 1994; p5-A.

*Violence, Substance Abuse:*
"Farrington friends set out to cut violence." Honolulu Star-Bulletin, Dec. 6, 1994; p A-3.

*Systemic Reform:*
"Charter Schools offer hope by not teaching students by the book." Honolulu Star-Bulletin. Oct.15, 1994; p A-7.

*Curriculum and Instruction:*
"Tech-Prep program opens new doors for MHS students." Ka Nupepa, Dec.20, 1994; p5.

*Resource and Information Acquisition:*
"High school facilities added." West Hawaii Today, Dec.4, 1994; p 4A.

*Use of Technology:*
"Kaiser High's community TV programs give Oahu the latest in teen-age news." Hawaii Kai Sun Press, Nov. 10-16, 1994; p A-2.

*Professional Improvement:*
"Waiver days take students out of class, but give them time for self-improvement." Central Sun Press, Oct. 6-12, 1994; p A2.

*At-Risk Youth:*
"Honokaa High teacher receives grant to help at-risk students." West Hawaii Today, Nov. 23, 1994; p24A.

*Other:* The articles or photos were associated with educational issues, but not within these nine categories.

Table 22. Public Concern in Educational Issues in Hawai'i

| Issues | Percent |
|---|---|
| Governance, Management, and Planning | 27.0 |
| Community, Partnerships | 15.2 |
| Violence, Substance Abuse | 13.1 |
| Systemic Reform | 10.8 |
| Curriculum and Instruction | 7.2 |
| Resource and Information Acquisition | 2.6 |
| Use of Technology | 1.4 |
| Professional Development | 1.0 |
| At-Risk Youth | .61 |
| Other | 21.1 |

It is assumed that newspapers reflect public concerns. As shown in Table 22, *governance, management, and planning*; *community and partnerships*; *violence and substance abuse*, *systemic reform* and *curriculum and instrument* were the most cited educational issues in the state of Hawai'i in 1994. The 1991 Hawai'i Opinion Poll on Public Education (HOPPE) indicated that *curriculum* and *substance abuse* were considered to be the most serious problems facing Hawai'i's public education. The literature review (Table 22) and the HOPPE survey were in agreement on these two issues. This indicates that, although there may have been some differences about these public concerns, overall, these public concerns are consistent in the state of Hawaii--at least for the period of data collection.

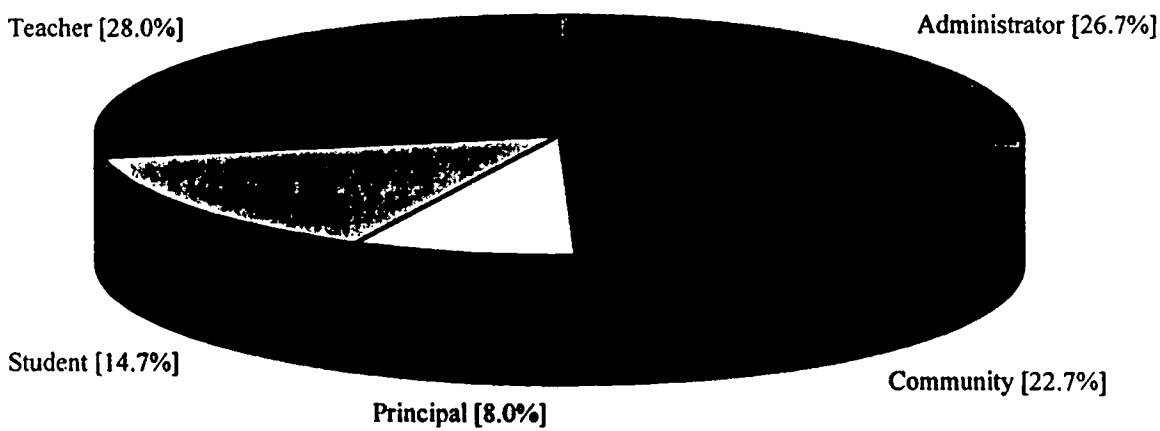
## KOSRAE STATE
FEDERATED STATES OF MICRONESIA

Kosrae State, Federated States of Micronesia, consists of one volcanic island of 42.1 square miles with 7,688 people (est. 1995). Kosrae has a wet tropical climate, many rivers, and waterfalls. It is almost exclusively rural with a subsistence economy. There are 6 public schools with a total of 2,546 students and 164 teachers in Kosrae (1994). The distribution of respondents from Kosrae enrolled in this educational needs assessment is shown in Figure 17.

***Figure 17***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*Kosrae*




**N = 75**

***Which of the nine educational need areas respondents in Kosrae view as the most important ?***

Table 23. Mean Ratings for Importance of Nine Need Areas in Kosrae

| Need Area | Importance |
|---|---|
| Curriculum and Instruction | 6.45 |
| Resource and Information Acquisition | 6.41 |
| Systemic reform | 6.37 |
| Professional Development | 6.33 |
| At-Risk Youth | 6.27 |
| Governance, Management, and Planning | 6.26 |
| Use of Technology | 6.22 |
| Community, Partnerships | 5.97 |
| Small Rural Schools | 5.89 |

As shown in Table 23, *curriculum and instruction, resource and information acquisition,* and *systemic reform* are the most important need areas in Kosrae. *Small rural schools, community and partnerships* and *use of technology* are the least important. Seven out of nine need areas rated above 6.0 in importance. Different perceptions of "small rural schools," however, could affect the rating of importance. In Kosrae, most schools are rural; only one school might be considered "not rural."

*In which of the nine educational need areas respondents in Kosrae view progress?*

Table 24. Mean Ratings for Progress of Nine Need Areas in Kosrae

| Need Area | Progress |
|---|---|
| Curriculum and Instruction | 4.23 |
| Governance, Management, and Planning | 4.21 |
| Professional Development | 4.07 |
| Systemic Reform | 4.06 |
| Resource and Information Acquisition | 3.87 |
| Small Rural Schools | 3.63 |
| At-Risk Youth | 3.63 |
| Community, Partnerships | 3.55 |
| Use of Technology | 2.95 |

As shown in Table 24, *curriculum and instruction*, *governance, management, and planning*, and *professional development* showed the most progress in educational need areas. *Use of technology, community and partnerships, at-risk youth,* and *small rural schools* showed the least progress in Kosrae.

***In which need areas is the gap between the importance of a need area and its progress the largest in Kosrae?***

Table 25. Mean Ratings for Need of Nine Need Areas in Kosrae

| Need Area | Need |
|---|---|
| Use of Technology | 3.24 |
| At-Risk Youth | 2.63 |
| Resource and Information Acquisition | 2.52 |
| Community, Partnerships | 2.40 |
| Systemic Reform | 2.28 |
| Small Rural Schools | 2.26 |
| Professional Development | 2.26 |
| Curriculum and Instruction | 2.20 |
| Governance, Management, and Planning | 2.07 |

It is assumed that the discrepancy between *importance* and *progress* can be regarded as *need.* As such, *use of technology, at-risk youth* and *resource and information acquisition* are the most needed educational issues in Kosrae. *Governance, management, and planning, curriculum and instruction,* and *professional development* are the least needed issues. Moreover, as shown in Table 25, the rating for *use of technology* was much higher than the rating for other need areas. Basically, *resource and information* are acquired through *use of technology*. Therefore, the *resource and information acquisition* was considered as the third most important need area in Kosrae.

***What is the difference in importance, progress, and needs between Kosrae and the Pacific region?***

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the Pacific region. The regional means for importance, progress, and needs for each need area were subtracted from those of Kosrae to see whether the entity's means are above or below regional means. Trends in rankings for importance, progress and needs were displayed to show similarities and differences between the entity and the Pacific region. Results for Kosrae are as follows:

Table 26. Difference in Mean Ratings for Importance, Progress, and Need in Kosrae and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | 0.09 | 0.31 | - 0.22 |
| Community, Partnerships | 0.01 | - 0.02 | 0.02 |
| Small Rural Schools | - 0.09 | 0.01 | - 0.09 |
| At-Risk Youth | 0.06 | 0.21 | - 0.17 |
| Curriculum and Instruction | 0.23 | 0.41 | - 0.20 |
| Professional Development | 0.06 | 0.16 | - 0.11 |
| Resource and Information Acquisition | 0.15 | 0.29 | - 0.15 |
| Systemic Reform | 0.10 | 0.28 | - 0.21 |
| Use of Technology | 0.11 | - 0.32 | 0.41 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

As shown in Table 26, the ratings in importance for eight need areas in Kosrae are higher than the regional means. These eight areas included *at-risk youth*; *curriculum and instruction*; *resource and information acquisition; use of technology; systemic reform; community, partnerships*; *governance, management, and planning*, and *professional development*. Rating in importance for *small rural schools* is slightly lower than the regional mean (see Figure 18). Trends in ranking of importance for need areas in Kosrae were similar to those of the Pacific region, except for *curriculum and instruction,* which was perceived as the most important educational issue in Kosrae.

In Table 26, seven of the need area ratings for progress in Kosrae are higher than the regional averages. In *use of technology* and *community and partnerships,* ratings for progress are slightly lower than regional averages (see Figure 19). Trends in rankings of progress for need areas in Kosrae were similar to those of the Pacific region.

Table 26 also illustrates that the needs for *use of technology* and *community and partnerships* in Kosrae are higher than the regional averages. In the other seven need areas, the means of needs are slightly lower than the regional averages (see Figure 20). Trends in rankings of need for educational issues in Kosrae and the Pacific region are similar.

*Figure 18*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

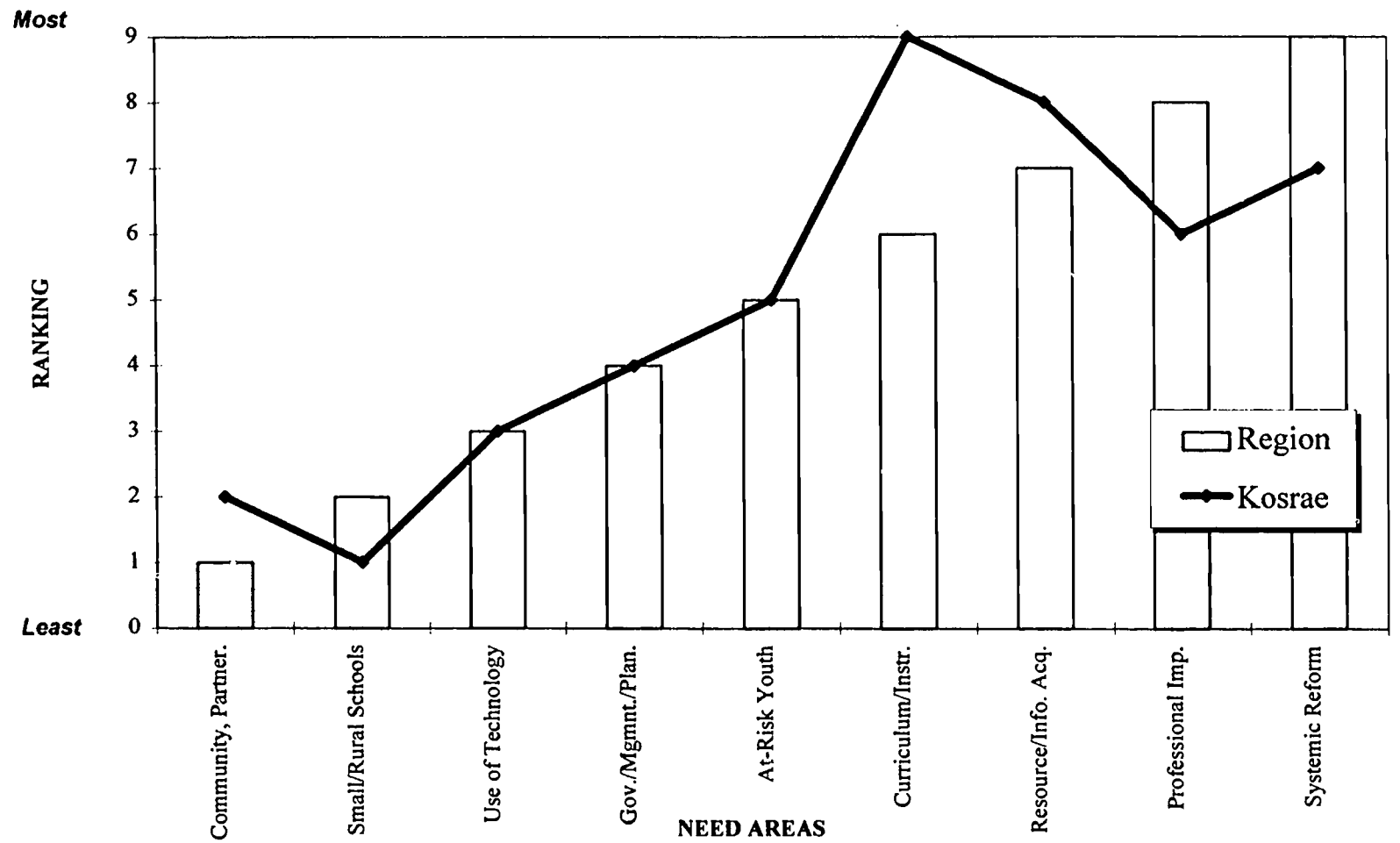


*Figure 19*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

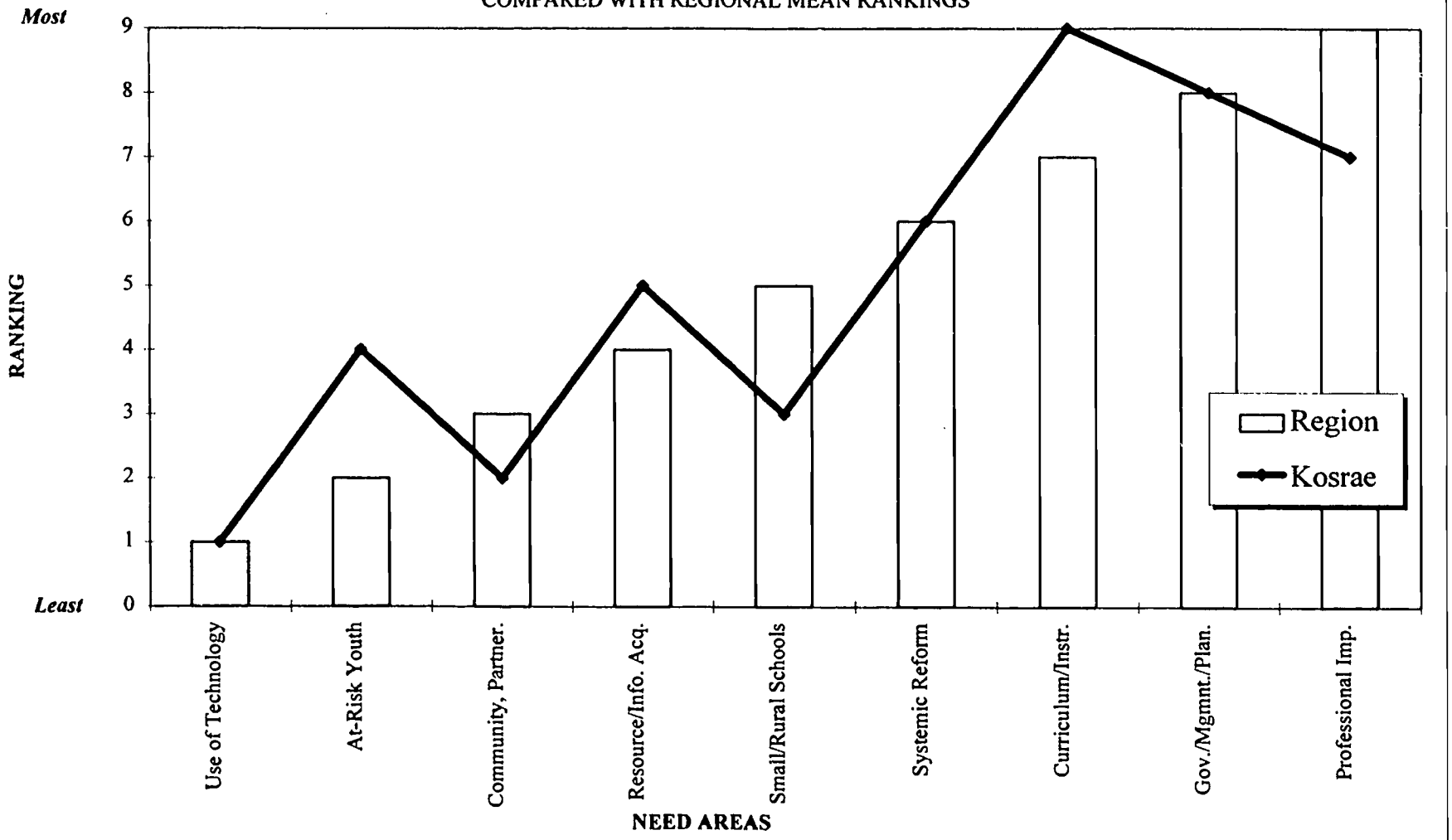
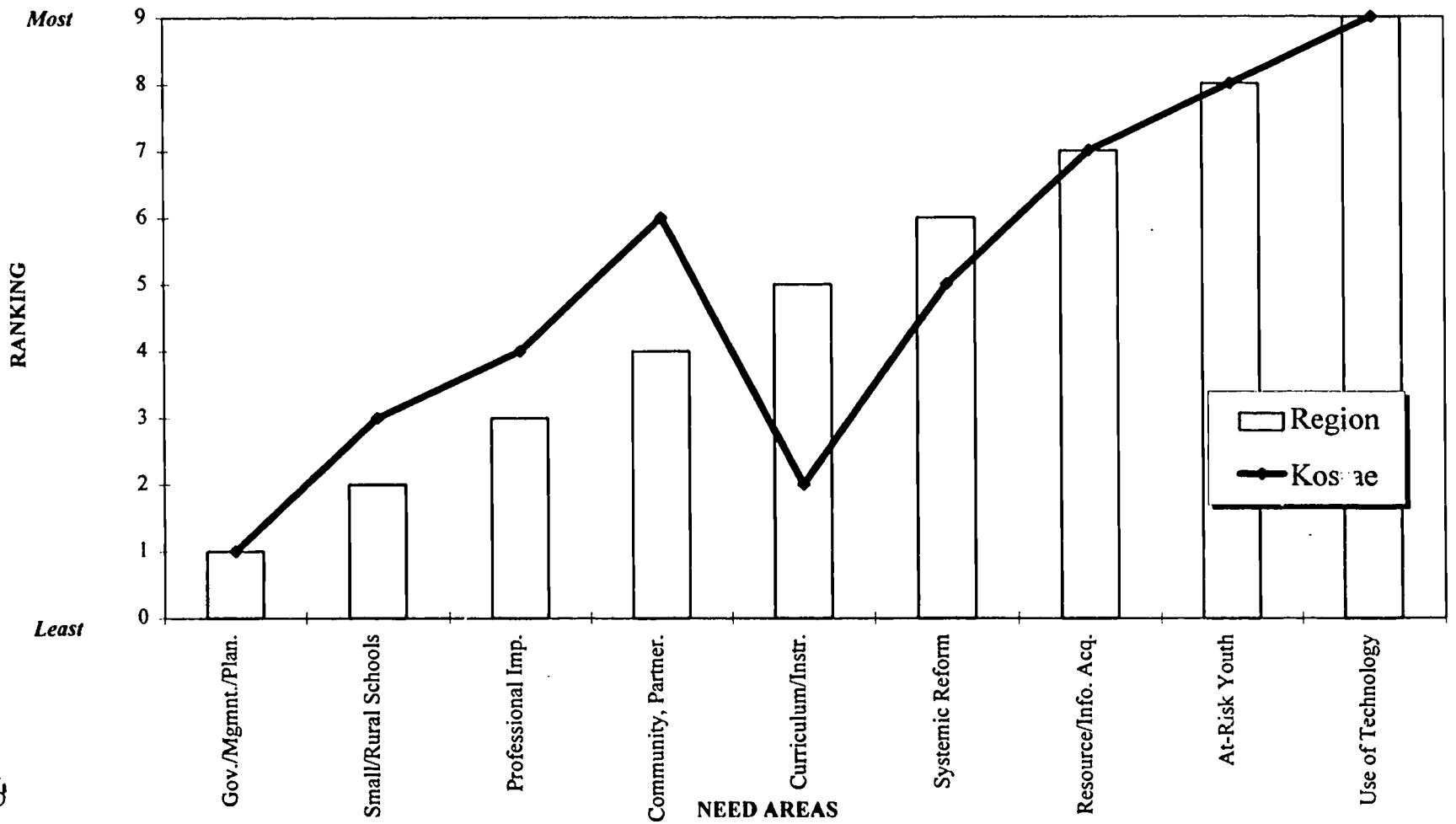


*Figure 20*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



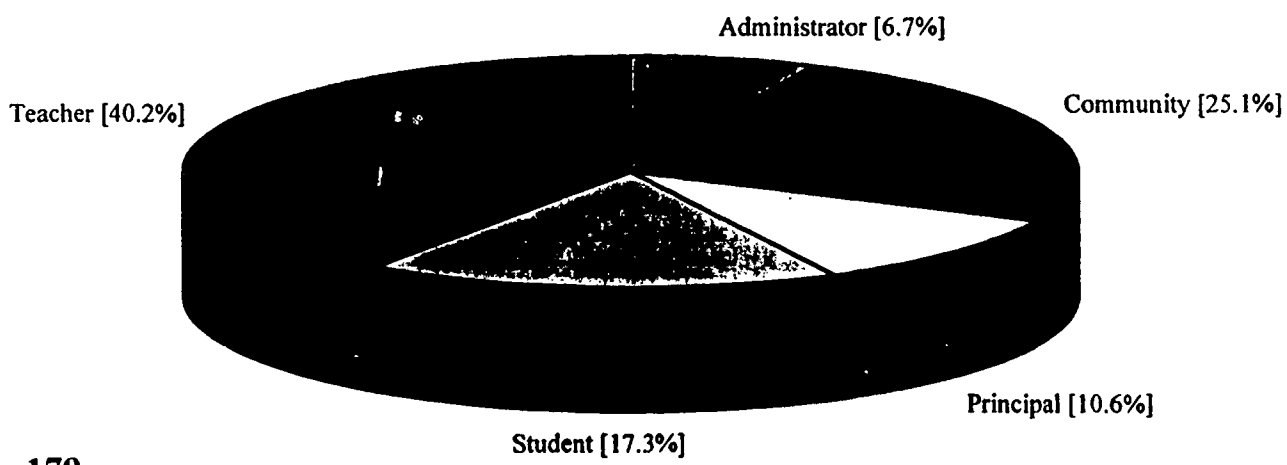
## REPUBLIC OF THE MARSHALL ISLANDS

The Republic of the Marshall Islands (RMI) consists of two chains of 29 coral atolls and five low islands stretching several hundred miles from north to south. The islands have a total land area of 70 square miles and a population of 53,665 (est. 1995). RMI, formerly a Trust Territory, entered into a compact of free association with the United States in October, 1986. One mainstay of the economy is the U.S. space tracking station on Kwajalein. The Marshalls are also developing agriculture and marine resources. There are 78 public schools with a total of 11,096 students and 443 teachers in RMI (1994). The distribution of respondents from RMI enrolled in this educational needs assessment is shown in Figure 21.

***Figure 21***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*Marshall Islands*




**N = 179**

***Which of the nine educational areas respondents in RMI view as the most important?***

Table 27. Mean Ratings for Importance of Nine Need Areas in RMI

| Need Area | Importance |
|---|---|
| Professional Development | 6.14 |
| Resource and Information Acquisition | 6.14 |
| Systemic Reform | 6.10 |
| Governance, Management, and Planning | 6.08 |
| Curriculum and Instruction | 6.01 |
| Small Rural Schools | 5.99 |
| Use of Technology | 5.93 |
| At-Risk Youth | 5.93 |
| Community, Partnerships | 5.90 |

As shown in Table 27, *professional development, resource and information acquisition* and *systemic reform* are the most important need areas in RMI. *Community and partnerships, use of technology,* and *at-risk youth* are the least important. The difference between the lowest and highest rating was only 0.24. As illustrated in Figure 21, more than 57 percent of respondents were teachers and students. Because the majority of respondents were from the classroom level, it is easy to understand why *professional development* and *resource and information acquisition* were the most important educational need areas in RMI.

***In which of the nine educational need areas respondents in the RMI view progress?***

Table 28. Mean Ratings for Progress of Nine Need Areas in RMI

| Need Area | Progress |
|---|---|
| Governance, Management, and Planning | 3.85 |
| Professional development | 3.75 |
| Systemic Reform | 3.64 |
| Resource and Information Acquisition | 3.61 |
| Curriculum and Instruction | 3.61 |
| Community, Partnerships | 3.47 |
| At-Risk Youth | 3.47 |
| Small Rural Schools | 3.45 |
| Use of Technology | 3.43 |

As shown in Table 28, *governance, management, and planning, professional development,* and *systemic reform* show the most progress in RMI. *Use of technology, small rural schools, at-risk youth,* and *community and partnerships* show the least. On a scale of 1 to 7, ratings for progress in need areas were below 4, and the difference between the lowest and highest rating was only 0.42.

***In which need areas is the gap between the importance of a need area and its progress the largest in the RMI?***

Table 29. Mean Ratings for Need of Nine Need Areas in RMI

| Need Area | Need |
|---|---|
| Small and Rural Schools | 2.56 |
| Resource and Information Acquisition | 2.52 |
| At-Risk Youth | 2.48 |
| Use of Technology | 2.48 |
| Systemic Reform | 2.44 |
| Community, Partnerships | 2.41 |
| Curriculum and Instruction | 2.39 |
| Professional development | 2.39 |
| Governance, Management, and Planning | 2.23 |

If it is assumed that the discrepancy between *importance* and *progress* can be regarded as *need,* as shown in Table 29, *small rural schools, resource and information acquisition, at-risk youth*, and *use of technology* are the most needed educational issues in RMI. *Governance, management, and planning; professional development,* and *curriculum and instruction* are the least needed.

***What is the difference in importance, progress, and needs between RMI and the Pacific region?***

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the Pacific region. The regional means for importance, progress, and need for each need area were subtracted from those of RMI to see whether the entity's means are above or below regional means. Trends in rankings for importance, progress and needs were displayed to show similarities and differences in educational issues between the entity and the Pacific region. Results for RMI are as follows:

Table 30. Difference in Mean Ratings for Importance, Progress, and Need in RMI and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | - 0.09 | - 0.05 | - 0.06 |
| Community, Partnerships | - 0.06 | - 0.10 | 0.03 |
| Small Rural Schools | 0.01 | - 0.17 | 0.21 |
| At-Risk Youth | - 0.28 | 0.05 | - 0.32 |
| Curriculum and Instruction | - 0.21 | - 0.21 | - 0.01 |
| Professional Development | - 0.13 | - 0.16 | 0.02 |
| Resource and Information Acquisition | - 0.12 | 0.03 | - 0.15 |
| Systemic Reform | - 0.17 | - 0.14 | - 0.05 |
| Use of Technology | - 0.18 | 0.16 | - 0.35 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

As shown in Table 30, ratings for importance in eight need areas in RMI are slightly lower than regional averages, except *small rural schools* (see Figure 22). Trends in rankings of importance for need areas in RMI are slightly different than those of the Pacific region. In the opinion of RMI respondents, the need area of *resource and information acquisition* has made the most progress.

Data in Table 30 show that the ratings for progress in six need areas in RMI are slightly lower than regional averages, except for *use of technology*, *at-risk youth*, and *resource and information acquisition* (see Figure 23). Trends in rankings of progress for need areas in RMI were slightly different than those of the Pacific region.

The needs--the gaps in ratings for importance and progress--for *small rural schools, community and partnerships,* and *professional development* for RMI are slightly higher than the regional averages. The other six educational need areas are smaller than the regional averages (see Figure 24). Trends in rankings of need in RMI differed from regional trends. Respondents

viewed *small rural school* as the most needed educational issue in RMI. This need area is second to the least need area in the Pacific region.

*Figure 22*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

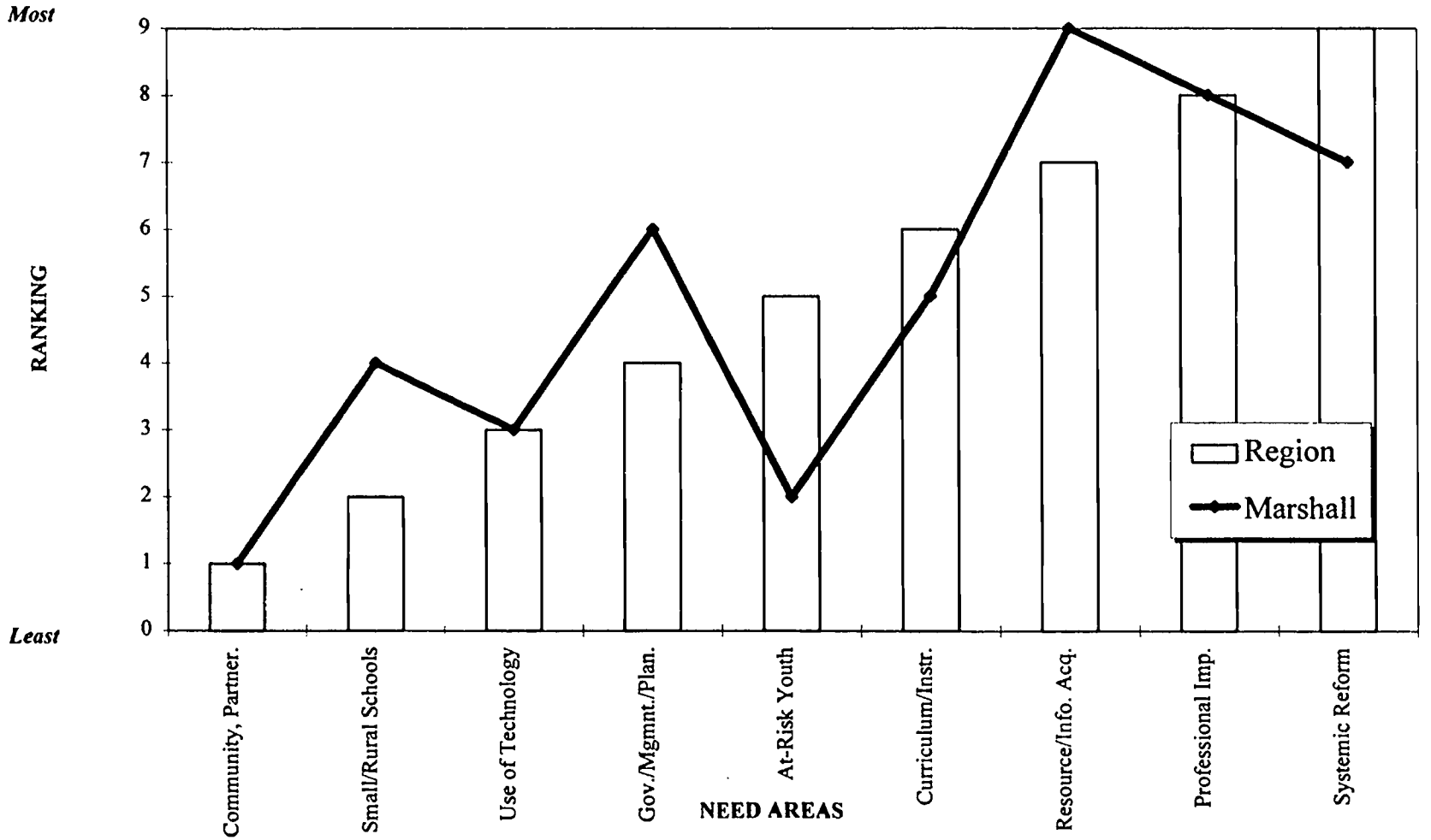


*Figure 23*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

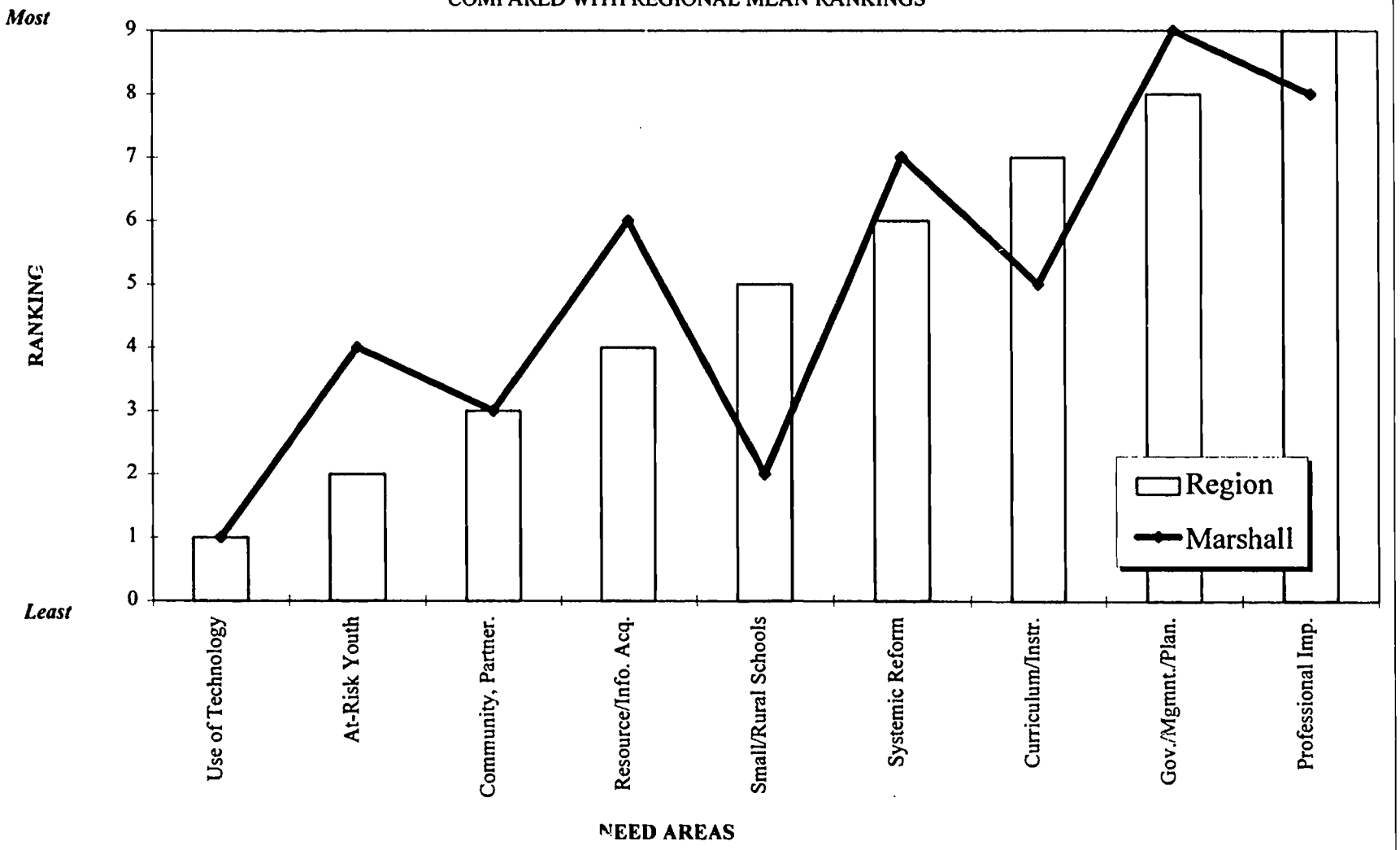
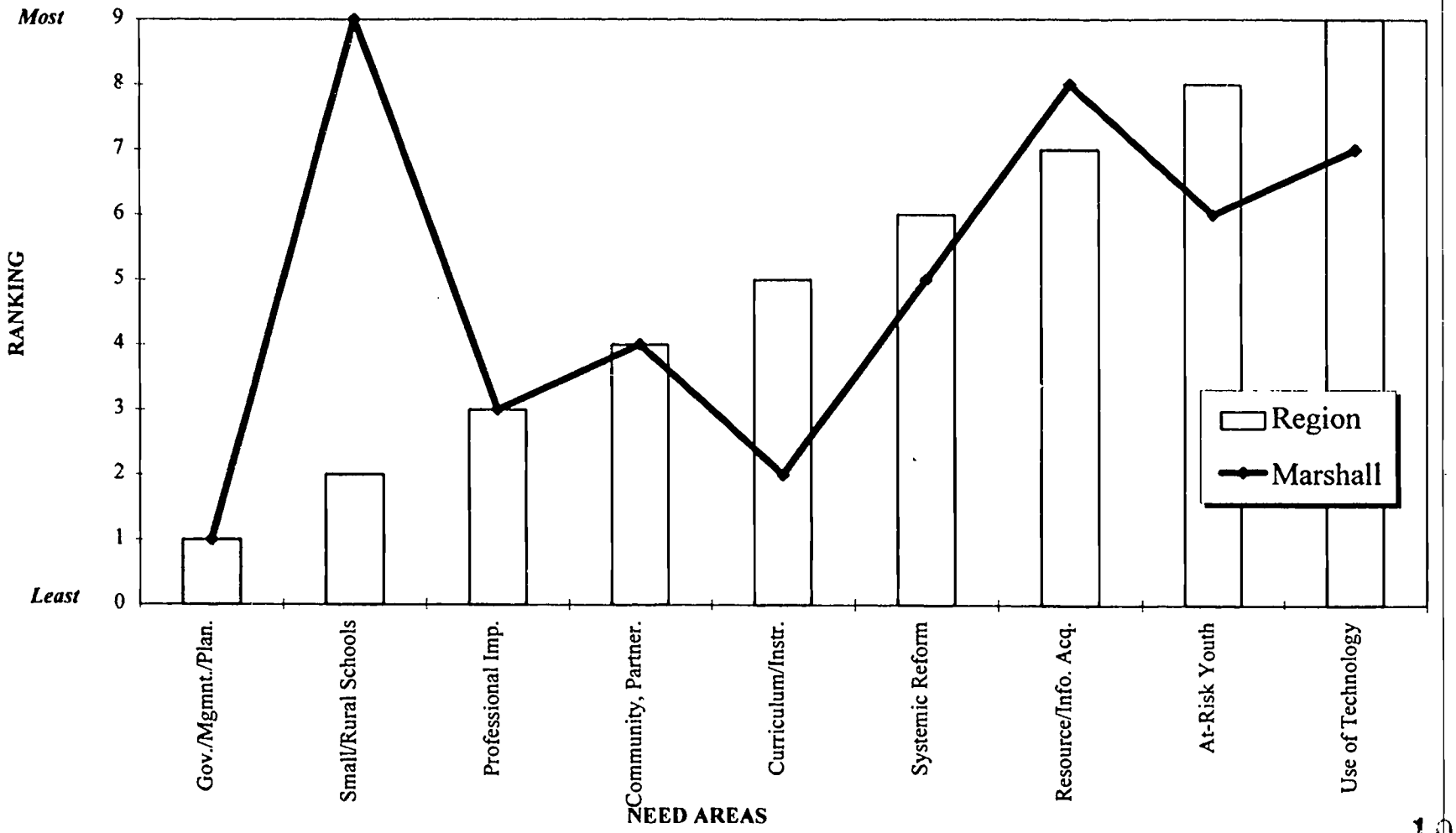


*Figure 24*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



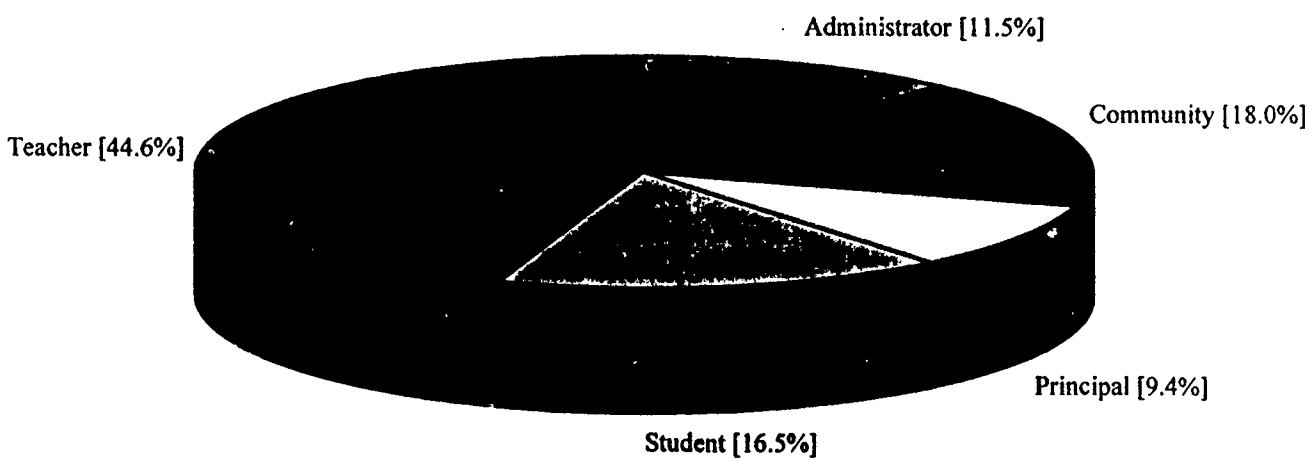
## REPUBLIC OF PALAU

The Republic of Palau is the westernmost jurisdiction in Micronesia, less than 500 miles from the Philippines. Although it consists of several hundred volcanic islands and a few coral atolls, only eight islands are inhabited with a population of 16,304 people (est.1995). The land area is 177 square miles. Palau, the last of the Trust Territories, is in the process of implementing a compact of free association with the United States. Palau's main economic strengths are in its marine resources, agriculture, and tourism potential; none of these has been fully developed. There are 18 public schools with a total of 2,716 students and 211 teachers in the Republic of Palau (1994). The distribution of the respondents from Palau in this educational needs assessment is shown in Figure 24.

***Figure 25***

*SAMPLE DISTRIBUTION AMONG ROLE GROUP*

*Palau*




**N = 139**

*Which of the nine educational areas respondents in Palau view as the most important?*

Table 31. Mean Ratings for Importance of Nine Need Areas in Palau

| Need Area | Importance |
|---|---|
| Professional Development | 6.54 |
| Use of Technology | 6.48 |
| At-Risk Youth | 6.47 |
| Systemic Reform | 6.47 |
| Curriculum and Instruction | 6.46 |
| Resource and Information Acquisition | 6.44 |
| Governance, Management, and Planning | 6.36 |
| Small Rural Schools | 6.29 |
| Community, Partnerships | 6.19 |

As shown in Table 31, *professional development*, *use of technology*, *at-risk youth*, *systemic reform*, and *curriculum and instruction* are the most important need areas in Palau. *Community, partnerships*, *small rural schools*, and *governance, management, and planning* are the least important. However, all ratings of importance for Palau were above 6 on a scale of 1 to 7. The difference between the lowest and the highest rating was 0.35. Apparently, respondents from Palau attached approximately the same importance to all educational need areas. As illustrated in Figure 25, more than 60 percent of respondents are teachers and students. Therefore, this outcome is to be expected because the majority of respondents are from the classroom level.

*In which of the nine educational need areas respondents in Palau view progress ?*

Table 32. Mean Ratings for Progress of Nine Need Areas in Palau

| Need Area | Progress |
|---|---|
| Professional Development | 3.97 |
| Governance, Management, and Planning | 3.88 |
| Curriculum and Instruction | 3.78 |
| Systemic Reform | 3.74 |
| Resource and Information Acquisition | 3.58 |
| Community, Partnerships | 3.54 |
| Small Rural Schools | 3.54 |
| At-Risk Youth | 3.26 |
| Use of Technology | 3.21 |

As shown in Table 32, *professional development*, *governance, management, and planning*, and *curriculum and instruction* showed the most progress in the nine educational need areas in Palau. *Use of technology*, *at-risk youth,* and *small rural schools* showed the least progress. The difference between the highest and lowest mean rating for progress was only 0.76.

***In which need areas is the gap between the importance of a need area and its progress the largest in Palau?***

Table 33. Mean Ratings for Need of Nine Need Areas in Palau

| Need Area | Need |
|---|---|
| Use of Technology | 3.27 |
| At-Risk Youth | 3.21 |
| Resource and Information Acquisition | 2.84 |
| Small Rural Schools | 2.75 |
| Systemic Reform | 2.74 |
| Curriculum and Instruction | 2.67 |
| Community, Partnerships | 2.65 |
| Professional Development | 2.57 |
| Governance, Management, and Planning | 2.51 |

If it is assumed that the discrepancy between *importance* and *progress* can be regarded as *need,* the findings in Table 33 show that *use of technology*, *at-risk youth,* and *resource and information acquisition* are the most needed educational issues in Palau. *Governance, management, and planning, professional development,* and *community and partnerships* are the least needed educational issues.

*What is the difference in importance, progress, and needs between Palau and the Pacific region?*

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the Pacific region. The regional means for importance, progress, and needs for each need area were subtracted from those of Palau to see whether entity's means are higher or lower than regional means. Trends in rankings for importance, progress and needs were displayed to show similarities and differences in educational issues between the entity and the Pacific region. Results for Palau are as follows:

Table 34. Difference in Mean Ratings for Importance, Progress, and Need in Palau and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | 0.19 | - 0.02 | 0.22 |
| Community, Partnerships | 0.23 | - 0.03 | 0.27 |
| Small Rural Schools | 0.31 | - 0.08 | 0.40 |
| At-Risk Youth | 0.26 | - 0.16 | 0.41 |
| Curriculum and Instruction | 0.24 | - 0.04 | 0.27 |
| Professional Development | 0.27 | 0.06 | 0.20 |
| Resource and Information Acquisition | 0.18 | 0.00 | 0.17 |
| Systemic Reform | 0.20 | - 0.04 | 0.25 |
| Use of Technology | 0.37 | - 0.06 | 0.44 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

As shown in Table 34, ratings for importance in all nine need areas in Palau are slightly higher than regional averages (see Figure 26). Trends in rankings were slightly different from those for the region. *Use of technology* was ranked second in importance as compared to second least in importance for the Pacific region.

Except for *professional development*, ratings for progress in all need areas in Palau are equal to, or slightly lower than the regional averages (see Figure 27). Trends in rankings of progress were similar to those of the region.

Table 34 also illustrates that the needs--gaps in ratings or importance and progress--in all need areas for Palau are slightly higher than regional averages (see Figure 28). Trends in rankings of need were similar to those of the region, except *small rural school*. Respondents ranked *use of technology* as the most important educational issue in Palau.

*Figure 26*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

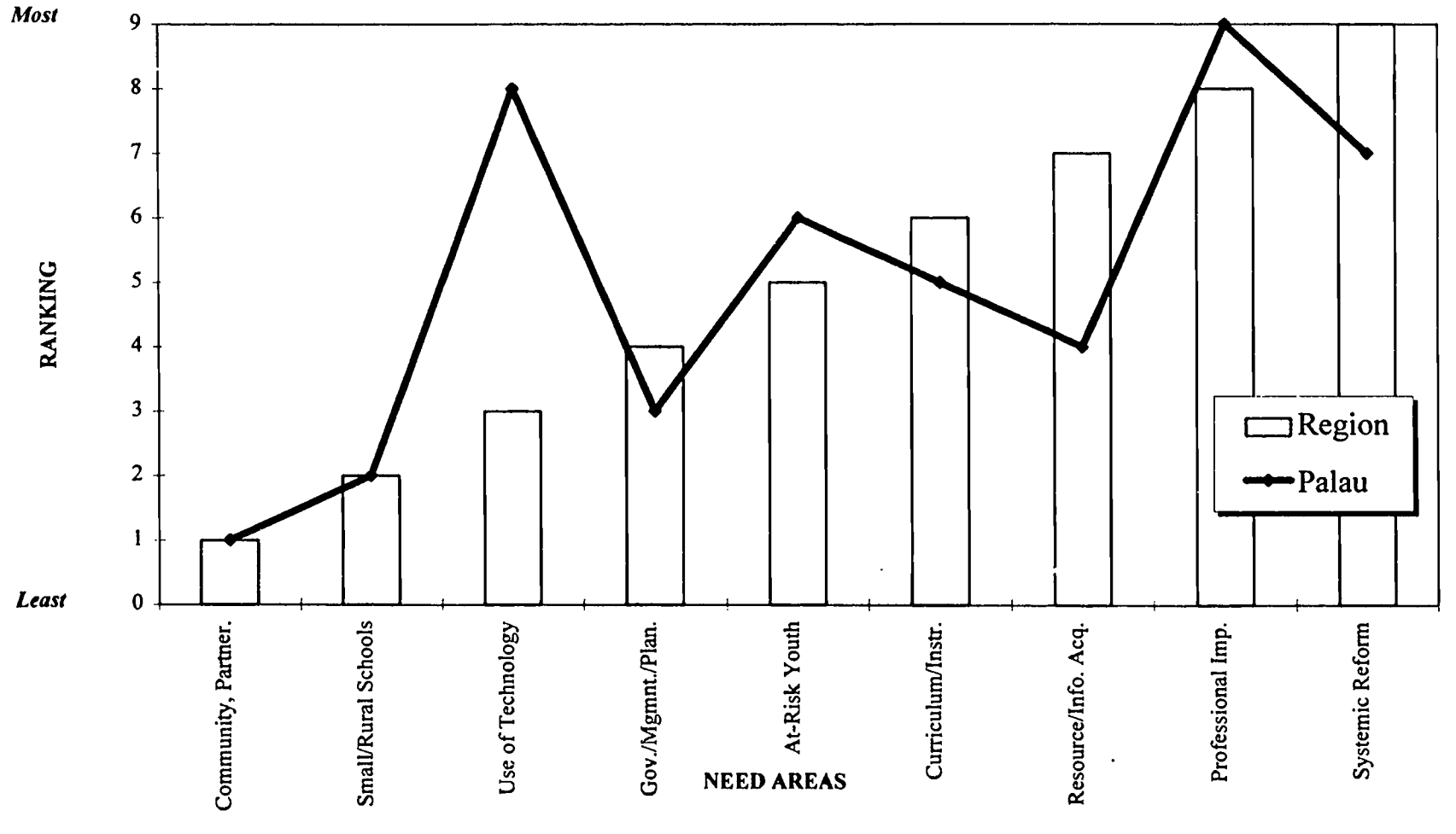


*Figure 27*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

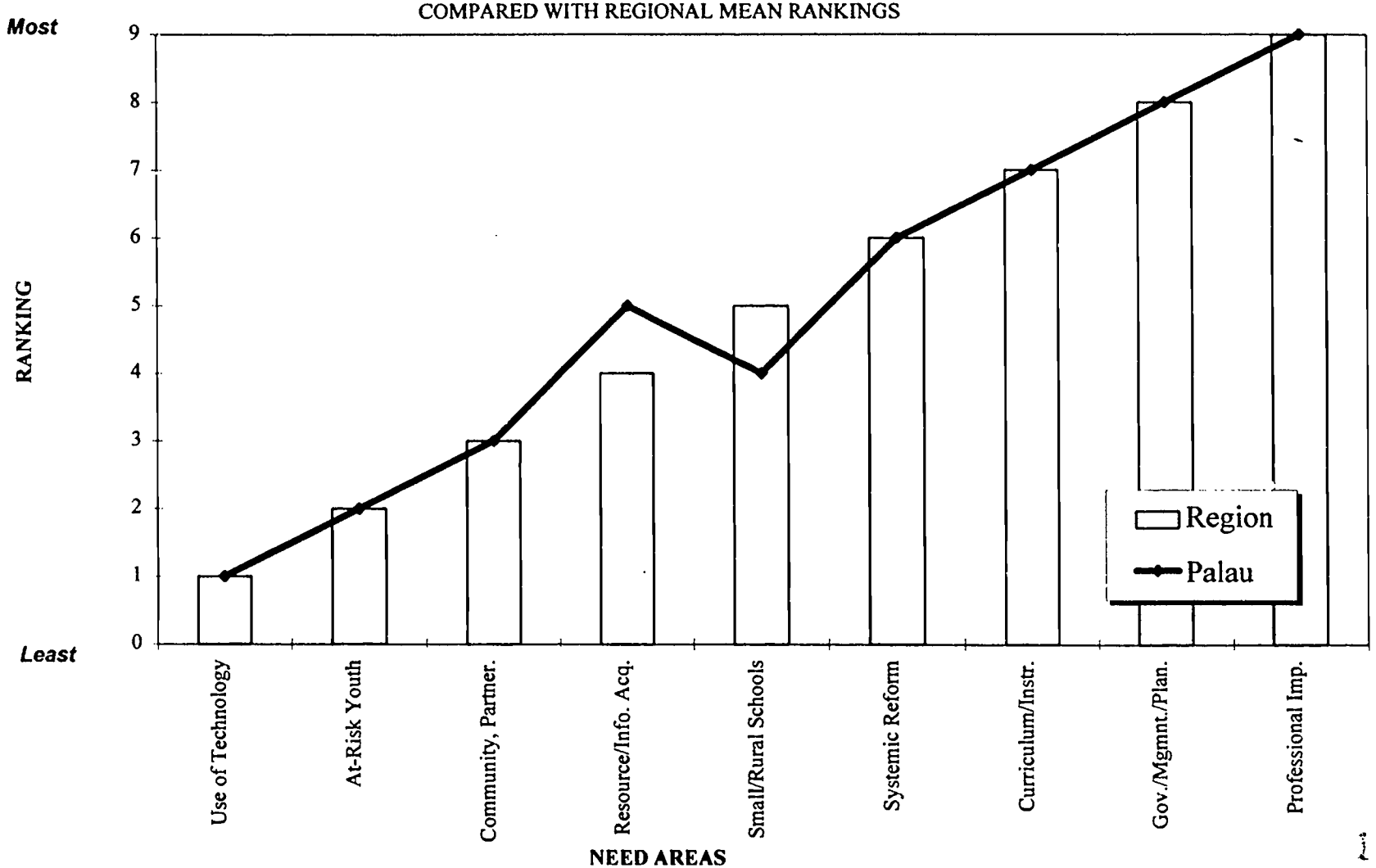
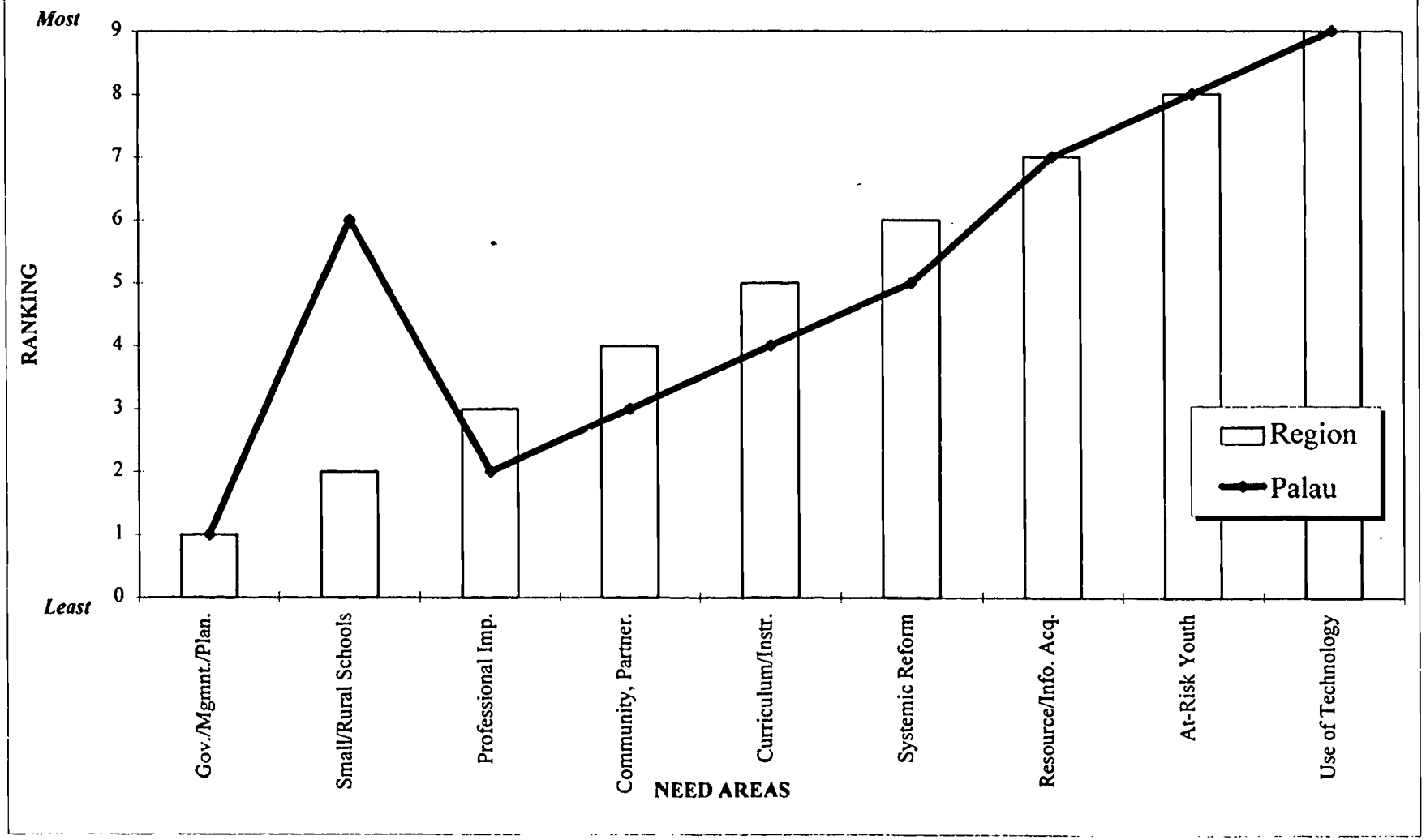


*Figure 28*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



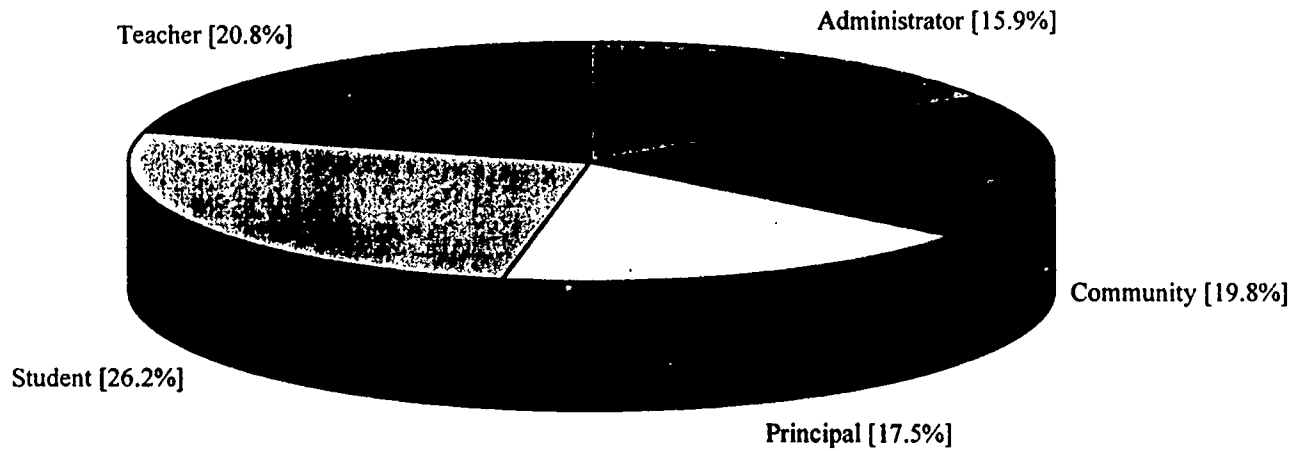
## POHNPEI STATE
FEDERATED STATES OF MICRONESIA

Pohnpei State consists of one large volcanic island and six inhabited atolls, with most of its 133 square miles on Pohnpei island. Its population is 34,480 (est.1995). Pohnpei State is the national capital of the Federated States of Micronesia and site of the College of Micronesia. Pohnpei is a beautiful and fertile island with much local agriculture and a growing tourism industry. It is also gaining a reputation for its gourmet peppers. There are 39 public schools with a total of 8,798 students and 466 teachers in Pohnpei State (1994). The distribution of the respondents from Pohnpei State enrolled in this educational needs assessment is shown in Figure 29.

***Figure 29***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*Pohnpei*




**N = 126**

***Which of the nine educational areas respondents in Pohnpei view as the most important?***

Table 35. Mean Ratings for Importance of Nine Need Areas in Pohnpei

| Need Area | Importance |
|---|---|
| Systemic Reform | 6.50 |
| Curriculum and Instruction | 6.45 |
| Resource and Information Acquisition | 6.45 |
| Professional Development | 6.44 |
| At-Risk Youth | 6.44 |
| Governance, Management, and Planning | 6.44 |
| Small Rural Schools | 6.26 |
| Use of Technology | 6.25 |
| Community, Partnerships | 6.20 |

As shown in Table 35, *systemic reform, curriculum and instruction*, and *resource and information acquisition* are the most important need areas in Pohnpei. *Community partnerships*, *use of technology*, and *small rural schools* are the least important. On a scale of 1 to 7, the ratings for all need areas were above 6, and the difference between the lowest and highest rating was only 0.30. As illustrated in Figure 33, more than 46 percent of respondents were teachers and students. Therefore, their viewpoint seems to be reflected in the high ratings given *systemic reform, curriculum and instruction* and *resource and information acquisition.* In addition, respondents from Pohnpei seemed to be more concerned about *systemic reform* than other educational issues.

*In which of the nine educational areas respondents in Pohnpei view progress?*

Table 36. Mean Ratings for Progress of Nine Need Areas in Pohnpei

| Need Area | Progress |
|---|---|
| Governance, Management, and Planning | 3.66 |
| Professional Development | 3.53 |
| Curriculum and Instruction | 3.44 |
| Systemic Reform | 3.39 |
| Small Rural Schools | 3.34 |
| Community, Partnerships | 3.33 |
| Resource and Information Acquisition | 3.31 |
| Use of Technology | 3.11 |
| At-Risk Youth | 2.97 |

As shown in Table 36, *governance, management, and planning, professional development*, and *curriculum and instruction* showed the most progress in educational need areas in Pohnpei. *At-risk youth, use of technology*, and *resource and information acquisition* showed the least progress. In contrast, ratings in all need areas are below 3.70, which falls just above the halfway point on the rating scale of 1 to 7. The difference between the highest and lowest rating is 0.69.

***In which need areas is the gap between the importance of a need area and its progress the largest in Pohnpei?***

Table 37. Mean Ratings for Need of Nine Need Areas in Pohnpei

| Need Area | Need |
|---|---|
| At-Risk Youth | 3.48 |
| Resource and Information Acquisition | 3.15 |
| Use of Technology | 3.13 |
| Systemic Reform | 3.11 |
| Curriculum and Instruction | 3.03 |
| Small Rural Schools | 2.92 |
| Professional Development | 2.92 |
| Community, Partnerships | 2.85 |
| Governance, Management, and Planning | 2.80 |

If it is assumed that the discrepancy between *importance* and *progress* can be regarded as *need*, findings shown in Table 37 indicate that *at-risk youth, resource and information acquisition,* and *use of technology* are the most needed educational issues in Pohnpei. *Governance, management, and planning, community and partnerships,* and *professional development* are the least needed.

***What is the difference in importance, progress, and needs between Pohnpei and the Pacific region?***

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the Pacific region. The regional means for importance, progress, and needs for each need area were subtracted from those of the entity to see whether the entity's means are above or below the regional means and by how much. Trends in rankings for importance, progress and needs were displayed to show similarities and differences in educational issues between the entity and the Pacific region. Results for Pohnpei are as follows:

Table 38. Difference in Mean Ratings for Importance, Progress, and Need in Pohnpei and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | 0.27 | - 0.24 | 0.51 |
| Community, Partnerships | 0.24 | - 0.24 | 0.47 |
| Small Rural Schools | 0.28 | - 0.28 | 0.57 |
| At-Risk Youth | 0.23 | - 0.45 | 0.68 |
| Curriculum and Instruction | 0.23 | - 0.38 | 0.63 |
| Professional Development | 0.17 | - 0.38 | 0.55 |
| Resource and Information Acquisition | 0.19 | - 0.27 | 0.48 |
| Systemic Reform | 0.23 | - 0.39 | 0.62 |
| Use of Technology | 0.14 | - 0.16 | 0.30 |

Note: Numbers in table = mean ratings for entity minus mean ratings for the Pacific region.

As shown in Table 38, ratings for importance in all need areas for Pohnpei are slightly higher than the regional averages (see Figure 30). Trends in rankings of importance for need areas in Pohnpei were similar to those of the region.

Ratings for progress in all nine need areas for Pohnpei are lower than regional averages (see Figure 31). Trends in rankings of progress were similar to those of the region, except *governance, management, and planning,* which showed the most progress in contrast with the need for *professional development* in the region.

The needs--the gaps in ratings for importance and progress--for Pohnpei are higher than regional averages. The differences in mean ratings between Pohnpei and the Pacific region for *at-risk youth, curriculum and instruction, systemic reform, small rural schools, professional development,* and *governance, management, and planning* were larger than 0.5 (see Table 38). As illustrated in Figure 29, more than 46 percent of respondents were teachers and students. Therefore, their viewpoint seems to be reflected in the high ratings of the need areas. In

addition, respondents from Pohnpei seemed to be more concerned about systemic reform than other respondents in the Pacific region. The trends in rankings in Pohnpei were similar to those of the region (see Figure 32). However, respondents from Pohnpei thought *at-risk youth* was the most critical issue that needs to be addressed.

*Figure 30*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

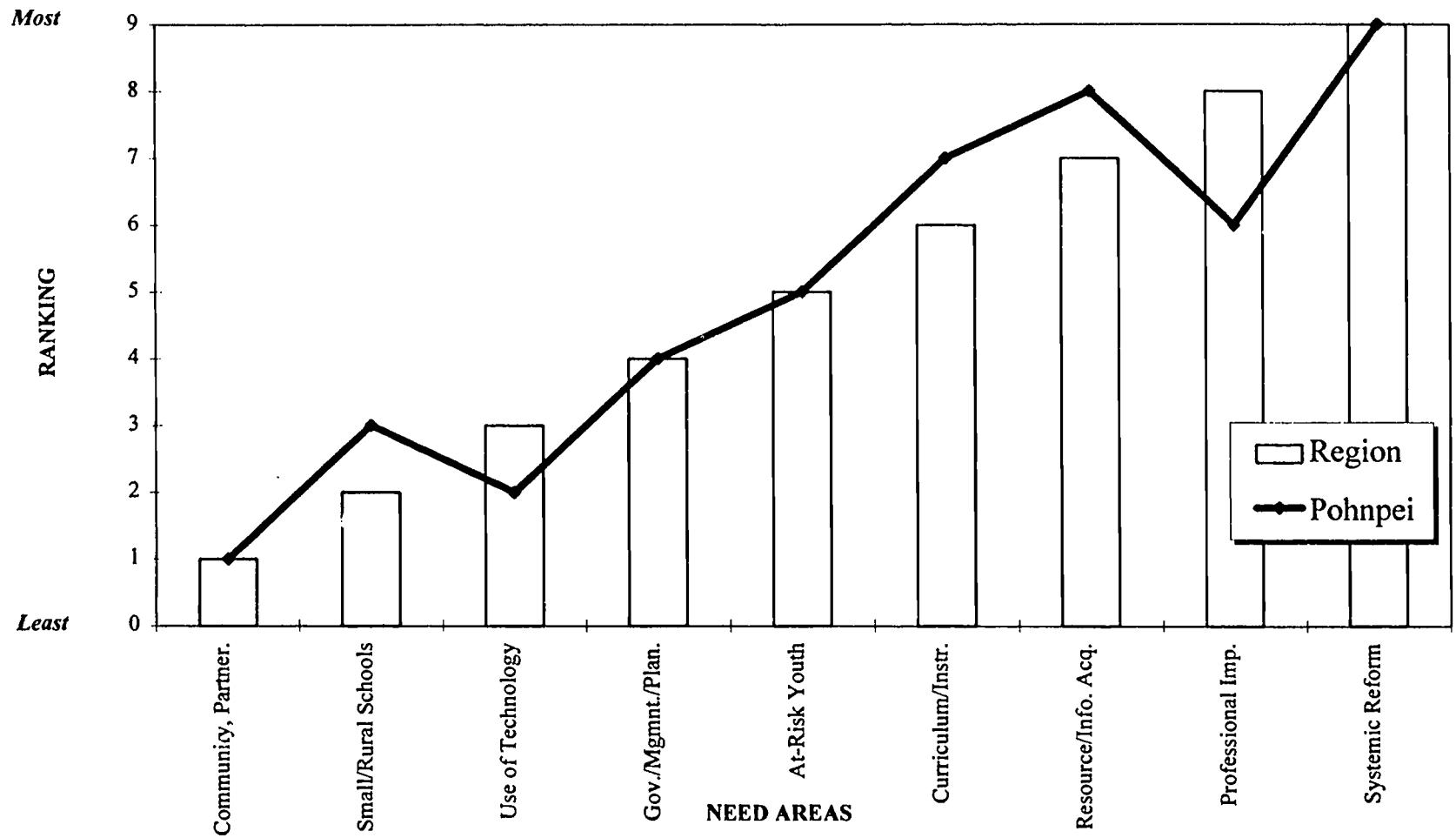


*Figure 31*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

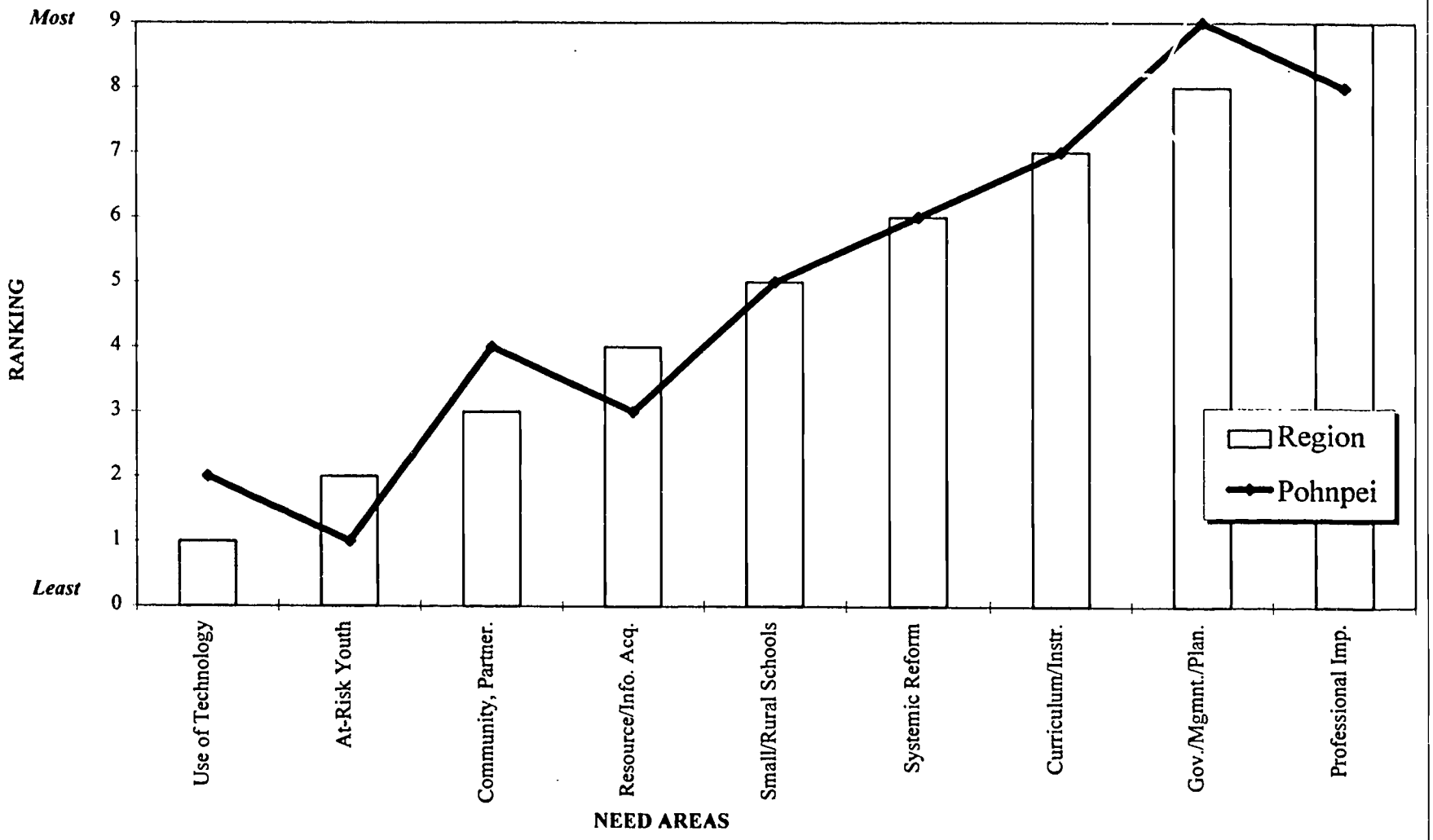
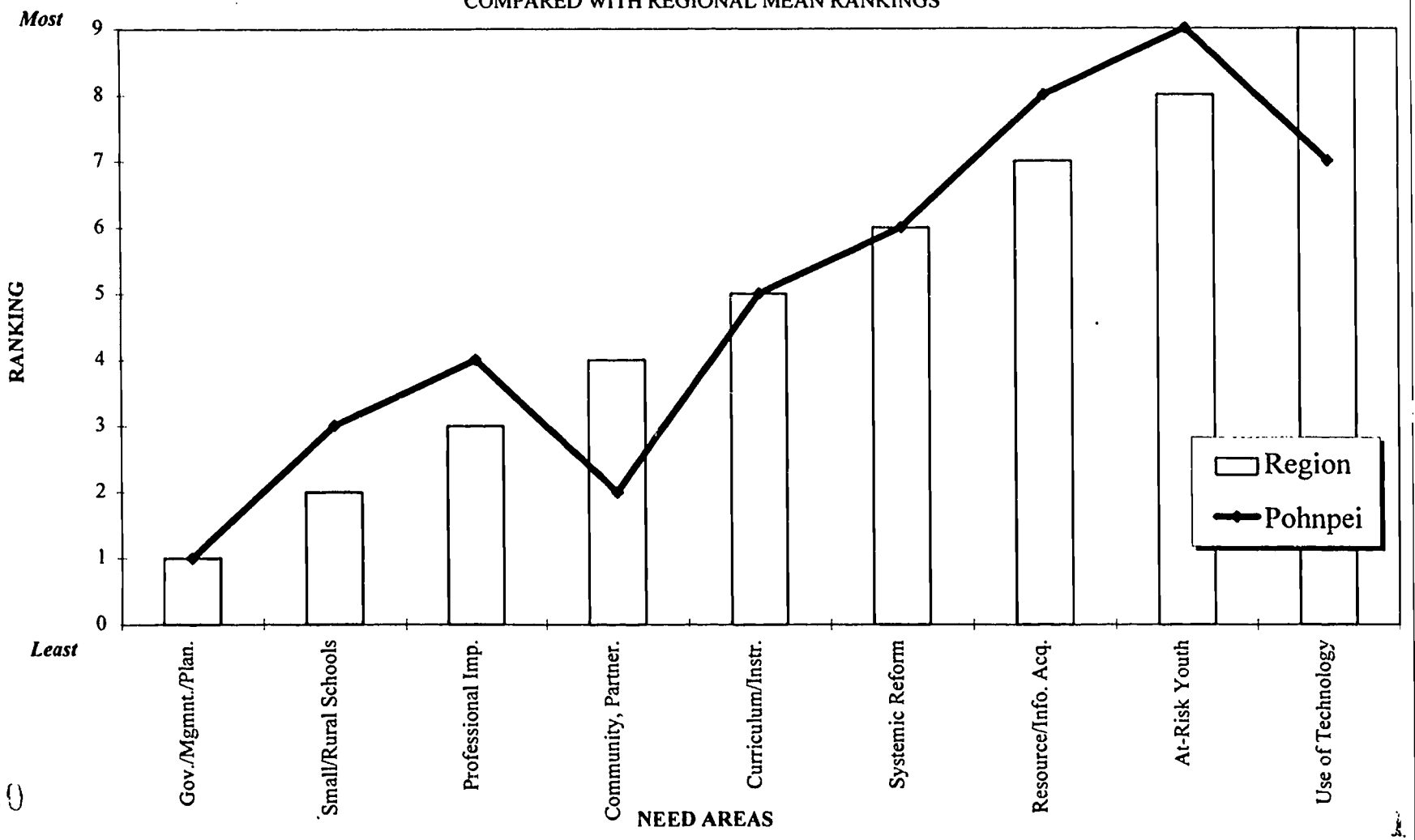


*Figure 32*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



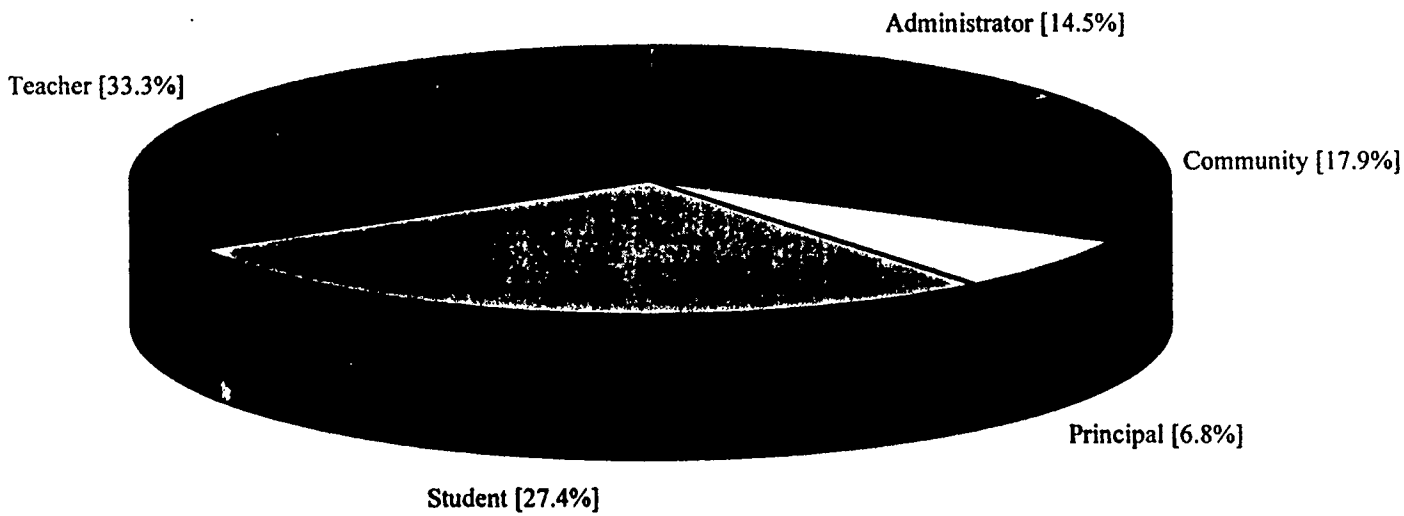
## YAP STATE
FEDERATED STATES OF MICRONESIA

Yap State consists of one volcanic complex of four islands plus 11 inhabited outer islands and atolls, with a total land area of 46 square miles. Two-thirds of its estimated 11,256 (est.1995) population live on Yap proper. Yap is one of the most traditional island groups of the Pacific. The three languages of Yap State are Yapese, Ulithian, and Woleaian. English is the common language. There are 31 public schools with a total of 2,655 students and 288 teachers in Yap State (1994). The distribution of respondents from Yap enrolled in this educational needs assessment is shown in Figure 33.

***Figure 33***

*SAMPLE DISTRIBUTION AMONG ROLE GROUPS*

*Yap*




**N = 117**



134

***Which of the nine educational need areas respondents in Yap view as the most important?***

Table 39. Mean Ratings for Importance of Nine Need Areas in Yap

| Need Area | Importance |
|---|---|
| Curriculum and Instruction | 6.22 |
| Professional Development | 6.21 |
| At-Risk Youth | 6.19 |
| Systemic Reform | 6.17 |
| Governance, Management, and Planning | 6.13 |
| Resource and Information Acquisition | 6.10 |
| Small Rural Schools | 5.98 |
| Use of Technology | 5.87 |
| Community, Partnerships | 5.85 |

As shown in Table 39, *curriculum and instruction, professional development, at-risk youth,* and *systemic reform* are the most important need areas in Yap. *Community and partnerships, use of technology, small rural schools*, and *resource and information acquisition* are the least important. Because most respondents were teachers and students (see Figure 33), they viewed *curriculum and instruction* and *professional development* as important.

*In which of the nine educational need areas respondents in Yap view progress?*

Table 40. Mean Ratings for Progress of Nine Need Areas in Yap

| Need Area | Progress |
|---|---|
| Professional Development | 3.86 |
| Governance, Management, and Planning | 3.82 |
| Systemic Reform | 3.72 |
| Curriculum and Instruction | 3.68 |
| Resource and Information Acquisition | 3.68 |
| Small Rural Schools | 3.66 |
| Community, Partnerships | 3.45 |
| At-Risk Youth | 3.39 |
| Use of Technology | 3.30 |

As shown in Table 40, *professional development, governance, management, and planning,* and *systemic reform* showed the most progress in Yap. *Use of technology, at-risk youth* and *community, partnerships* experienced the least progress. The nine need areas for progress are rated below 4.0 in a rating range of 1 to 7. The difference between the highest and lowest rating for progress is only 0.56.

***In which need areas is the gap between the importance of a need area and its progress the largest in Yap?***

Table 41. Mean Ratings for Need of Nine Need Areas in Yap

| Need Area | Need |
|---|---|
| At-Risk Youth | 2.78 |
| Use of Technology | 2.56 |
| Curriculum and Instruction | 2.54 |
| Systemic Reform | 2.45 |
| Resource and Information Acquisition | 2.41 |
| Community, Partnerships | 2.39 |
| Professional Development | 2.35 |
| Governance, Management, and Planning | 2.31 |
| Small Rural Schools | 2.30 |

If it is assumed that the difference between *importance* and *progress* can be regarded as *need,* findings reported in Table 41 indicate that *at-risk youth*, *use of technology,* and *curriculum and instruction* are the most needed educational issues in Yap. *Small rural schools*, *governance, management, and planning* and *professional development* are the least needed.

*What is the difference in importance, progress, and needs between Yap and the Pacific region?*

In addition to ratings by entity, ratings for importance, progress, and the gap between them (i.e., needs) were compared with those of the Pacific region. The regional means for importance, progress, and needs for each need area were subtracted from those of the entity to see by how much the entity's means are above or below the regional means. Trends in rankings for importance, progress and needs were displayed to show similarities and differences between the entity and the Pacific region. Results for Yap are as follows:

Table 42. Difference in Mean Ratings for Importance, Progress, and Need in Yap and Pacific region

| Need Area | Importance | Progress | Need |
|---|---|---|---|
| Governance, Management, and Planning | - 0.04 | - 0.08 | 0.02 |
| Community, Partnerships | - 0.11 | - 0.12 | 0.01 |
| Small Rural Schools | 0.00 | 0.04 | - 0.05 |
| At-Risk Youth | - 0.02 | - 0.03 | - 0.02 |
| Curriculum and Instruction | 0.00 | - 0.14 | 0.14 |
| Professional Development | - 0.06 | - 0.05 | - 0.02 |
| Resource and Information Acquisition | - 0.16 | 0.10 | - 0.26 |
| Systemic Reform | - 0.10 | - 0.06 | - 0.04 |
| Use of Technology | - 0.24 | 0.03 | - 0.27 |

Note: Numbers in table = mean ratings for the entity minus mean ratings for the Pacific region.

As shown in Table 42, ratings for importance in all nine need areas in Yap are equal to, or slightly lower, than regional averages. Trends in rankings of importance were slightly different than those in the region (see Figure 34). *Curriculum and instruction* was perceived as the most important educational issue in Yap.

The means in ratings for progress in Yap are slightly lower than regional averages, except *resource and information, small rural schools*, and *use of technology* (see Figure 35). Trends in progress of need areas were similar to those in the region.

The needs--the discrepancy between the ratings for importance and progress--in all need areas except *curriculum and instruction, governance, management, and planning,* and *community and partnerships* in Yap are slightly lower than regional averages (see Figure 36). Trends in rankings of needs were similar to those of the region. However, *at-risk youth* was considered the most critical issue that needs to be addressed in Yap, instead of *use of technology* for the Pacific region.

*Figure 34*

**TRENDS IN RANKINGS OF MEANS FOR IMPORTANCE**

COMPARED WITH REGIONAL MEAN RANKINGS

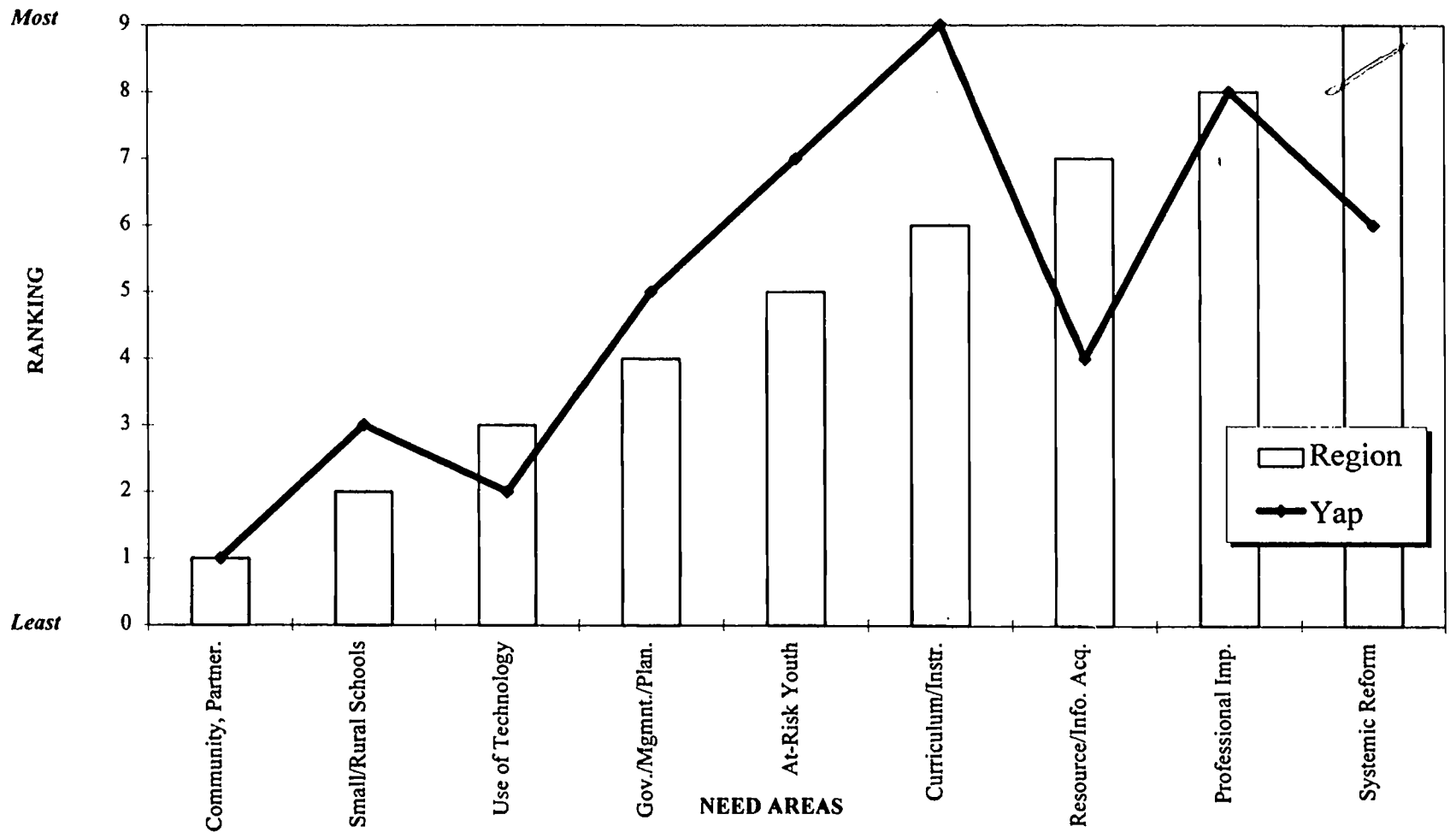


*Figure 35*

**TRENDS IN RANKINGS OF MEANS FOR PROGRESS**

COMPARED WITH REGIONAL MEAN RANKINGS

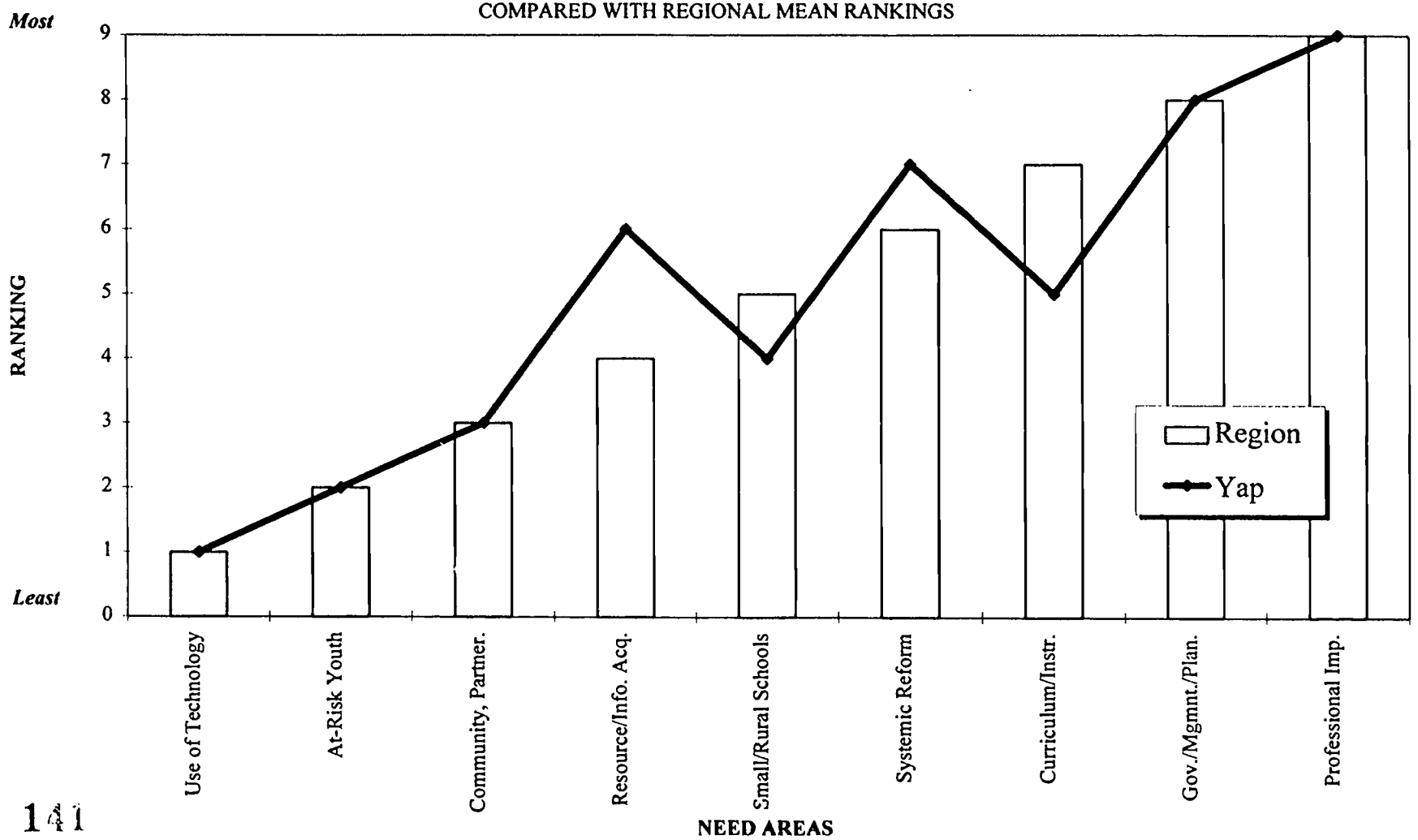
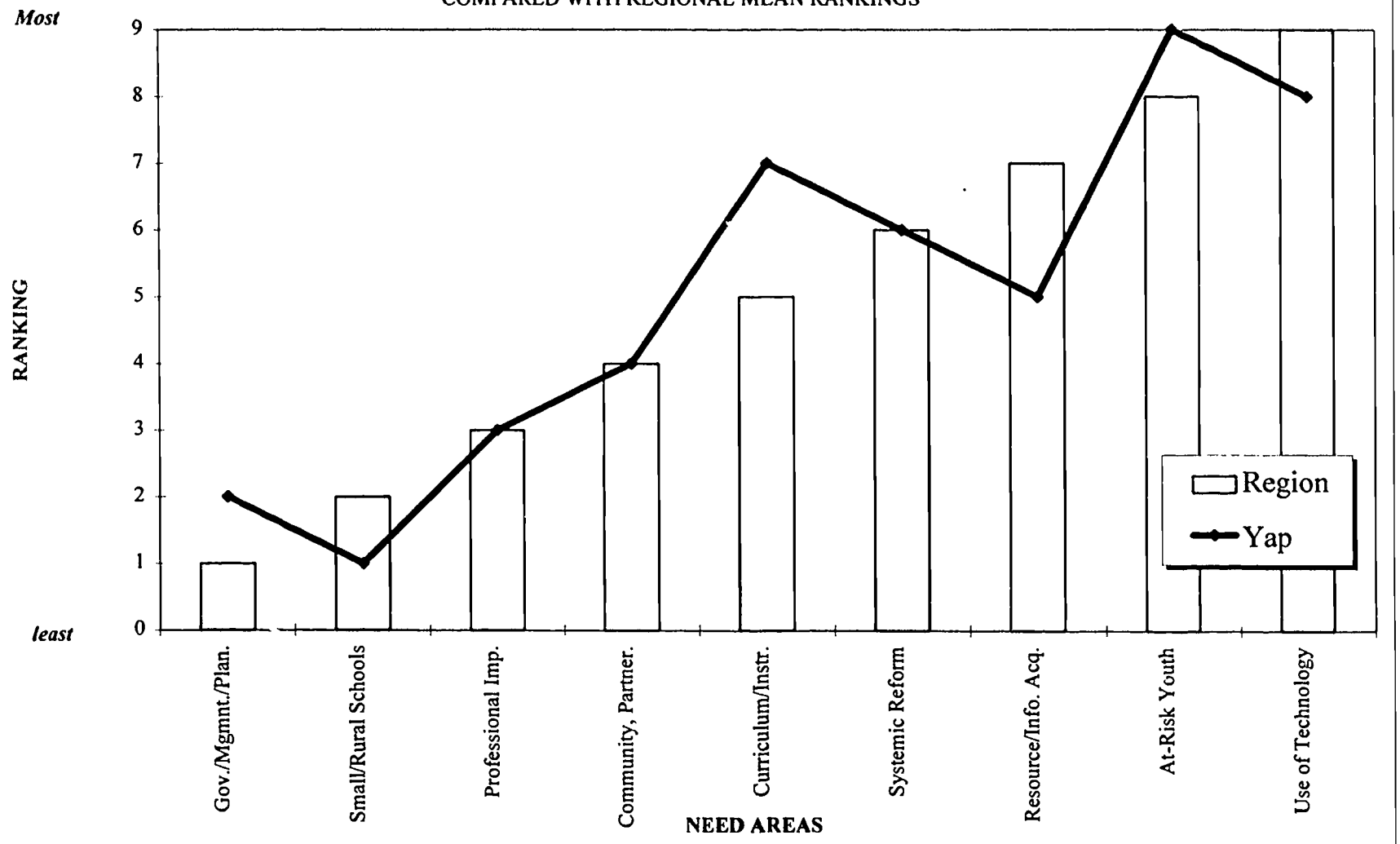


*Figure 36*

**TRENDS IN RANKINGS OF MEANS FOR NEEDS**

COMPARED WITH REGIONAL MEAN RANKINGS



**PACIFIC REGION**
(Nine Entities Combined)

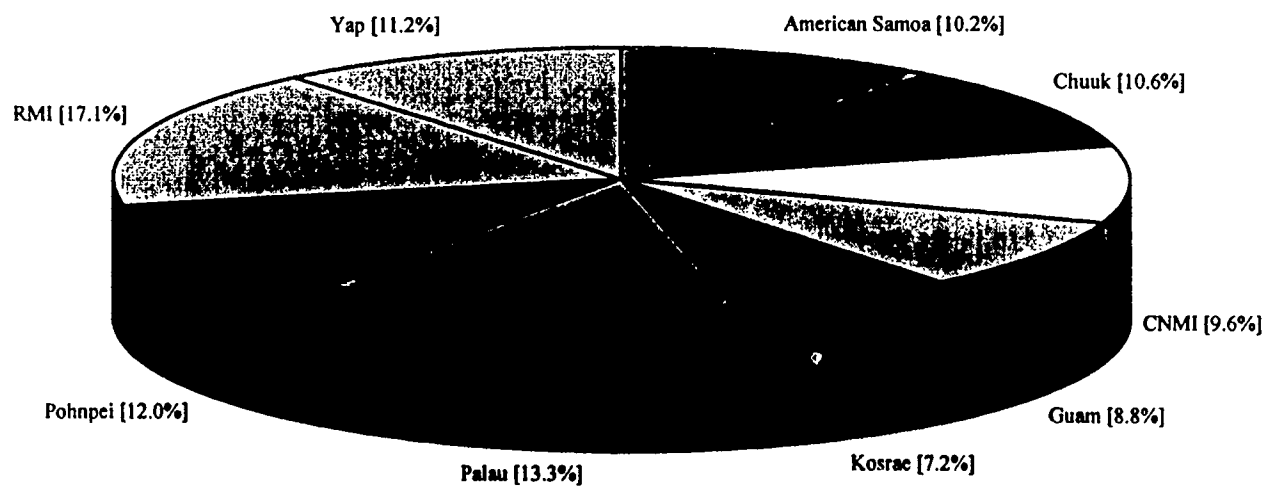
145

146

*Figure 37*

SAMPLE DISTRIBUTION AMONG ENTITIES

Pacific Region

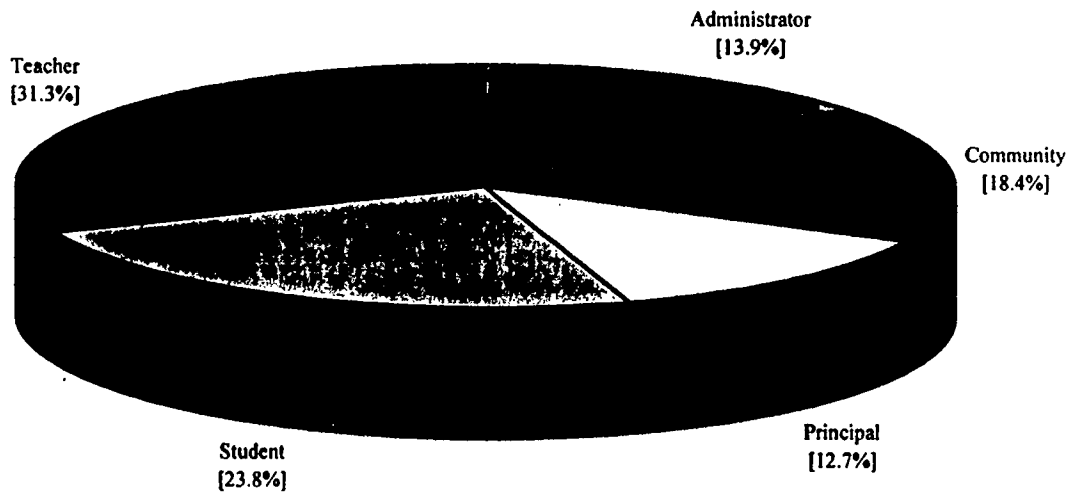



**N = 1046**

*Figure 38*

SAMPLE DISTRIBUTION AMONG ROLE GROUPS

Pacific Region



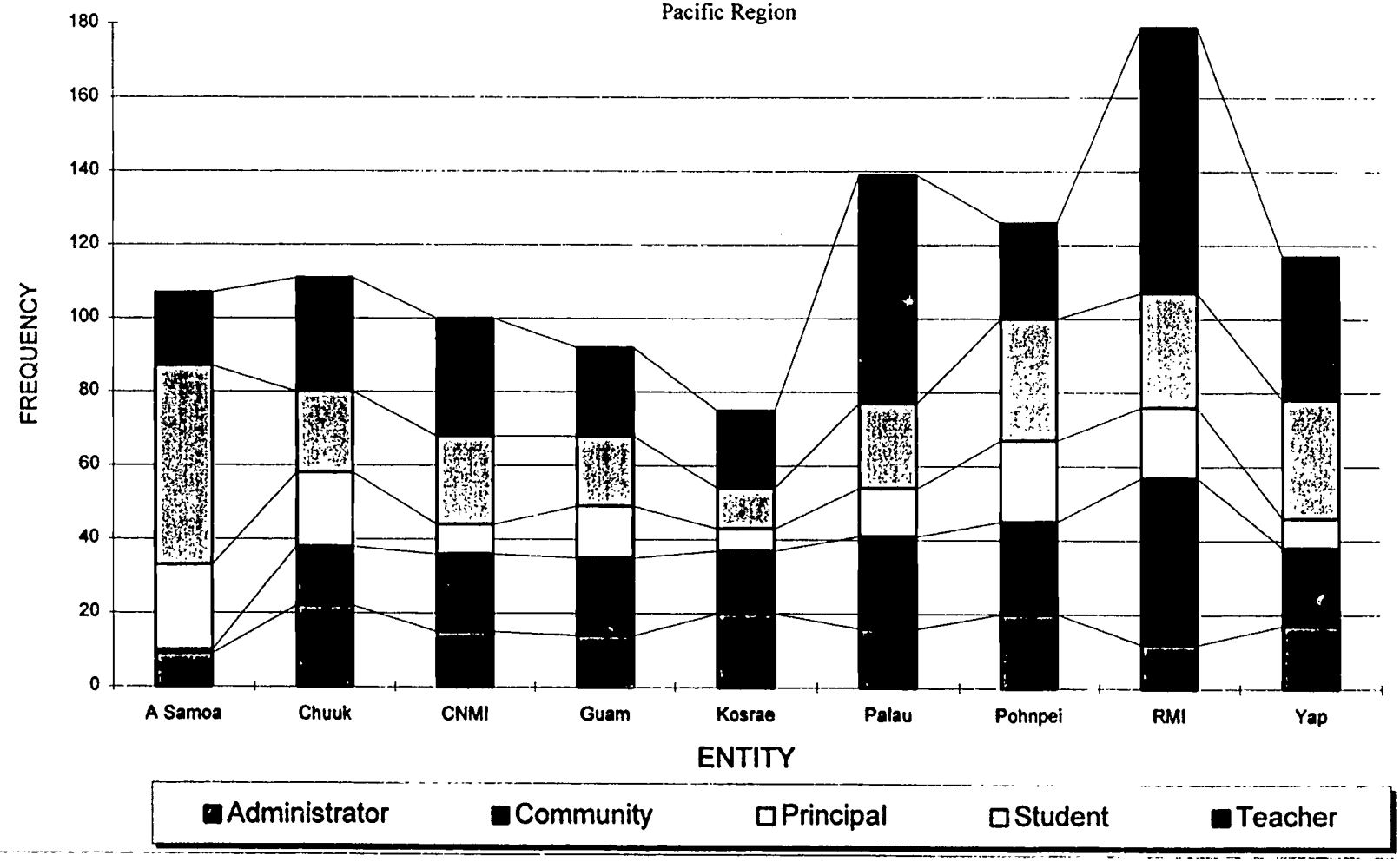

**N = 1046**

*Figure 39*

FREQUENCY DISTRIBUTION OF DATA

AMONG ROLE GROUPS IN EACH ENTITY

Pacific Region



***Which of the nine educational need areas respondents in the Pacific region consider the most important ?***

Table 43. Mean Ratings for Importance of Nine Need Areas in the Pacific Region

| Need Area | Importance |
|---|---|
| Systemic Reform | 6.27 |
| Professional Development | 6.27 |
| Resource and Information Acquisition | 6.26 |
| Curriculum and Instruction | 6.22 |
| At-Risk Youth | 6.21 |
| Governance, Management, and Planning | 6.17 |
| Use of Technology | 6.11 |
| Small Rural Schools | 5.98 |
| Community, Partnerships | 5.96 |

As shown in Table 43 and Figure 40, *systemic reform*, *professional development*, and *resource and information acquisition* are perceived as the most important need areas in the Pacific region. *Community, partnerships*, *small rural schools,* and *use of technology* are viewed as the least important. Seven of nine ratings for importance in the Pacific region are higher than 6.0. The difference between the highest and lowest rating for importance in the Pacific region is only 0.31.

***Figure 40***

RATINGS FOR IMPORTANCE OF NEED AREAS

*Pacific Region*

*In which of the nine educational need areas respondents in the Pacific region view progress?*

Table 44. Mean Ratings for Progress of Nine Need Areas in the Pacific Region

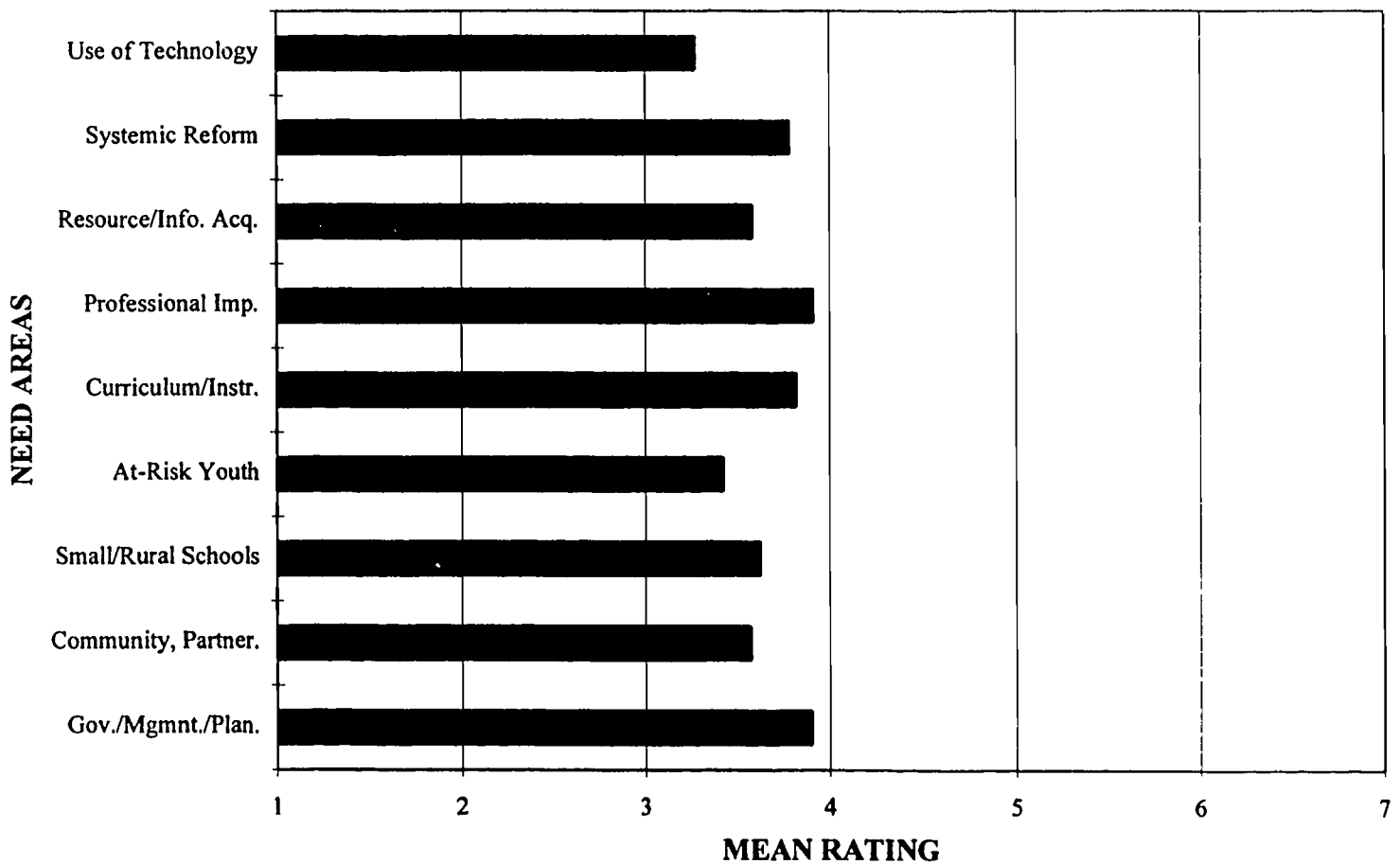
| Need Area | Progress |
|---|---|
| Professional Development | 3.91 |
| Governance, Management, and Planning | 3.90 |
| Curriculum and Instruction | 3.82 |
| Systemic Reform | 3.78 |
| Small Rural Schools | 3.62 |
| Resource and Information Acquisition | 3.58 |
| Community, Partnerships | 3.57 |
| At-Risk Youth | 3.42 |
| Use of Technology | 3.27 |

As shown in Table 44 and Figure 41, *professional development, governance, management, and planning,* and *curriculum and instruction* are perceived as showing the most progress in the Pacific region. *Use of technology, at-risk youth* and *community and partnerships* are viewed as showing the least progress.

*Figure 41*

RATINGS FOR PROGRESS OF NEED AREAS

*Pacific Region*



***In which need areas is the gap between the importance of a need area and its progress the largest in the Pacific region?***

Table 45. Mean Ratings for Need of Nine Need Areas in the Pacific Region

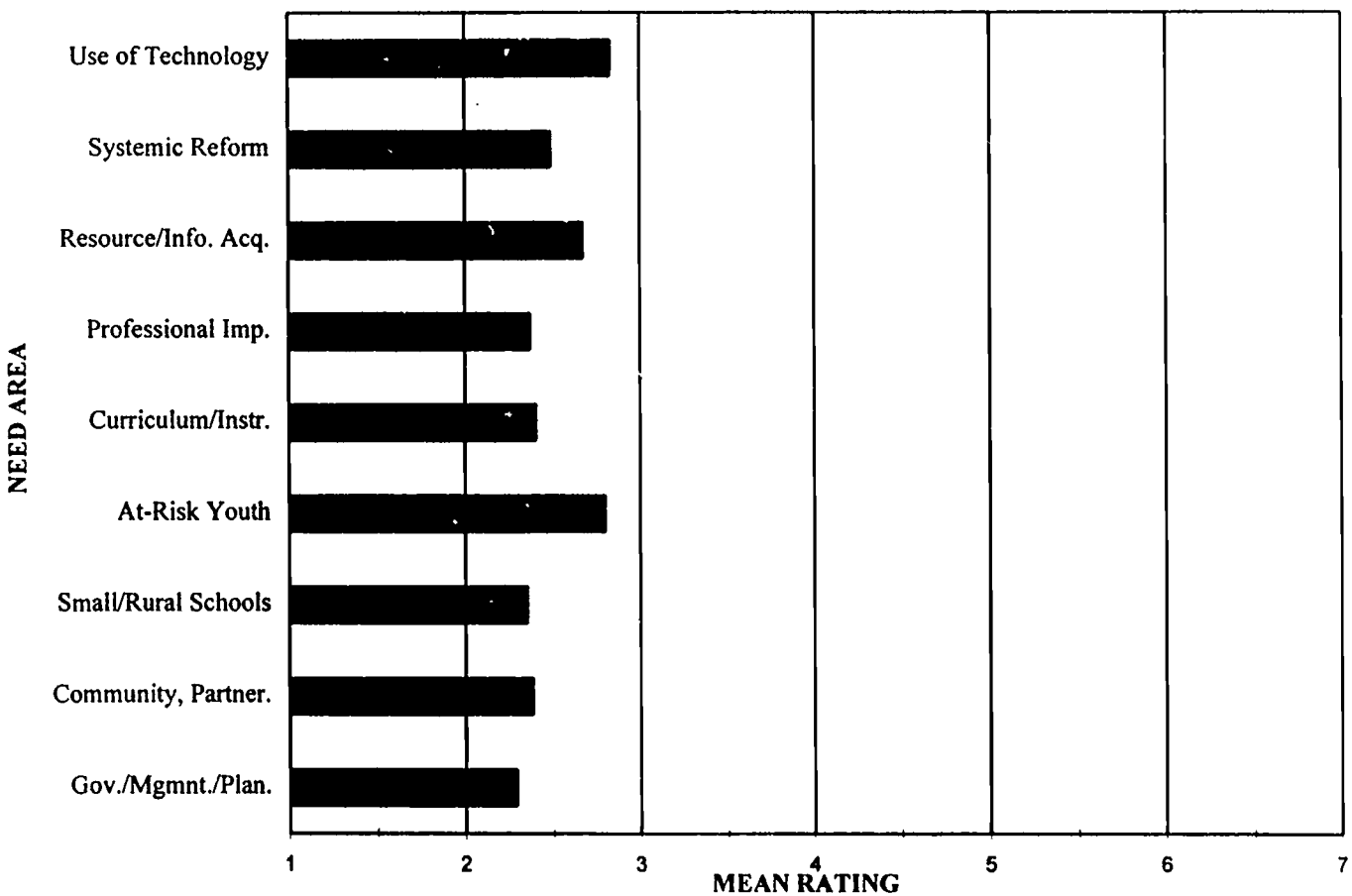
| Need Area | Need |
|---|---|
| Use of Technology | 2.83 |
| At-Risk Youth | 2.80 |
| Resource and Information Acquisition | 2.67 |
| Systemic Reform | 2.49 |
| Curriculum and Instruction | 2.40 |
| Community, Partnerships | 2.38 |
| Professional Development | 2.37 |
| Small Rural Schools | 2.35 |
| Governance, Management, and Planning | 2.29 |

If it is assumed that the discrepancy between *importance* and *progress* can be regarded as a *need,* Table 45 and Figure 41 indicate that *use of technology, at-risk youth,* and *resource and information acquisition* are perceived as the most needed educational issues to be addressed in the Pacific region. Meanwhile, *governance, management, and planning, small rural schools,* and *professional development* are viewed as the least needed. However, the difference between the means of the most and least needed area for the Pacific region is only 0.54. This finding also suggests that *use of technology, at-risk youth,* and *resource and information acquisition* can be regarded as educational issue priorities in the Pacific region, without neglecting other educational issues, such as *governance, management, and planning; small rural schools,* and *professional development.*

***Figure 42***

*RATINGS FOR NEED OF NEED AREAS*

*Pacific Region*



***How do ranks of importance of the nine need areas as rated by the Pacific region differ from those rated by each entity?***

Table 46. Need Areas Ranked According to Importance by Each Entity

| Area | Am. Samoa | Chuuk | CNMI | Guam | Kosrae | RMI | Palau | Pohnpei | Yap | Region Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| Governance, Management, and Planning | 3 | 9 | 3 | 3 | 4 | 6 | 3 | 6 | 5 | 4 |
| Community, Partnerships | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| Small Rural Schools | 1 | 2 | 1 | 1 | 1 | 4 | 2 | 3 | 3 | 2 |
| At-Risk Youth | 6 | 4 | 5 | 9 | 5 | 3 | 7 | 5 | 7 | 5 |
| Curriculum and Instruction | 4 | 5 | 6 | 5 | 9 | 5 | 5 | 8 | 9 | 6 |
| Professional Development | 8 | 8 | 8 | 6 | 6 | 9 | 9 | 4 | 8 | 9 |
| Resource and Information Acquisition | 9 | 7 | 7 | 7 | 8 | 8 | 4 | 7 | 4 | 7 |
| Systemic Reform | 7 | 6 | 9 | 8 | 7 | 7 | 6 | 9 | 6 | 8 |
| Use of Technology | 5 | 3 | 4 | 4 | 3 | 2 | 8 | 2 | 2 | 3 |

Note: 9 = most important; 1 = least important

Rankings for importance in nine need areas for the Pacific region (as derived from the entire data set) and for each of the entity are shown in Table 46. The rankings are similar among entities and, as expected, most of them substantially agree with regional rankings except for *governance, management, and planning*, and *at-risk youth*. Those two need areas are ranked from the most important to the least important throughout the region. Because many entities viewed each need area as important shows the extent to which the rankings for the nine entities agree with regional rankings. It also highlights which of the nine need areas are important. Need areas in Table 46 with rankings of 7, 8, or 9 indicate "Important;" those with rankings of 1, 2, or 3 indicate "Not Important." Need areas with ranks of 4, 5, and 6 indicate "Somewhat Important." The results are shown in Table 47.

Table 47. Number of Entities That Viewed Each Need Area as Important

| Need Area | (Counts by Number of Entities) | | Degree of Importance |
|---|---|---|---|
| | Important | Not Important | Regional Rank |
| Governance, Management, and Planning | 1 | 4 | Somewhat Important |
| Community, Partnerships | 0 | 9 | Not Important |
| Small Rural Schools | 0 | 8 | Not Important |
| At-Risk Youth | 3 | 1 | Important |
| Curriculum and Instruction | 3 | 0 | Important |
| Professional Development | 6 | 0 | Important |
| Resource and Information Acquisition | 7 | 0 | Important |
| Systemic Reform | 6 | 0 | Important |
| Use of Technology | 1 | 5 | Somewhat Important |

As shown in Table 47, rankings for importance in the nine need areas are approximately the same among the nine entities and agree with regional rankings. Therefore, it can be concluded that *professional development, systemic reform, resource and information acquisition, curriculum and instruction,* and *at-risk youth* are the most important need areas in the Pacific region.

***How ranks of importance for the nine need areas as rated by the Pacific region (i.e., by all roles) differ from those rated by each role of respondents?***

Table 48. Need Areas Ranked According to Importance by Respondent Role

| Area | Administrator | Community | Principal | Student | Teacher | Region Rank |
|---|---|---|---|---|---|---|
| Governance, Management, and Planning | 4 | 5 | 4 | 6 | 4 | 4 |
| Community, Partnerships | 2 | 2 | 2 | 1 | 1 | 1 |
| Small Rural Schools | 1 | 1 | 1 | 2 | 2 | 2 |
| At-Risk Youth | 5 | 3 | 6 | 5 | 6 | 5 |
| Curriculum and Instruction | 7 | 7 | 5 | 3 | 5 | 6 |
| Professional Development | 8 | 9 | 7 | 7 | 8 | 9 |
| Resource and Information Acquisition | 6 | 6 | 8 | 8 | 7 | 7 |
| Systemic Reform | 9 | 8 | 9 | 4 | 9 | 8 |
| Use of Technology | 3 | 4 | 3 | 9 | 3 | 3 |

Note: 9 = most important; 1 = least important

Rankings for importance in nine need areas for the Pacific region and for each of the five role groups of respondents are shown in Table 48. These rankings are similar among the role groups and, as expected, except for student ratings in *use of technology* and *systemic reform,* agree with regional rankings. A look at how many role groups ranked each of the need areas as "important" shows the extent to which rankings by the five role groups agree with the regional rankings, and also highlights which of the nine need areas are important. Need areas in Table 48 with rankings of 7, 8, or 9 indicate "Important;" those with rankings 1, 2, or 3 indicate "Not Important." Need areas with rankings of 4, 5, and 6 indicate "Somewhat Important." The results are shown in Table 49.

Table 49. Number of Role Groups that Viewed Each Need Area as Important

| Need Area | (Counts by Number of Roles) | | Degree of Importance |
|---|---|---|---|
| | Important | Not Important | Regional Rank |
| Governance, Management, and Planning | 0 | 0 | Not Important |
| Community, Partnerships | 0 | 5 | Not Important |
| Small Rural Schools | 0 | 5 | Not Important |
| At-Risk Youth | 0 | 1 | Not Important |
| Curriculum and Instruction | 2 | 1 | Important |
| Professional Development | 5 | 0 | Important |
| Resource and Information Acquisition | 3 | 0 | Important |
| Systemic Reform | 4 | 0 | Important |
| Use of Technology | 1 | 4 | Somewhat Important |

As shown in Table 49, rankings for importance in the nine need areas are almost the same among the five roles of respondents in the region, except student ratings for *use of technology* and *systemic reform*. In this analysis by role groups, *professional development*, *systemic reform*, *curriculum and instruction*, and *resource and information acquisition* are the most important need areas in the Pacific region. The importance of *professional development*, *systemic reform*, *curriculum and instruction*, and *resource and information acquisition* is consistent in Tables 48 and 49. Although there may be some differences among entities or roles, findings concerning importance of need areas are legitimate.

*How do rankings of progress in the nine need areas as rated by the Pacific region differ from those for each entity?*

Table 50. Need Areas Ranked According to Progress by Each Entity

| Area | A. Samoa | Chuuk | CNMI | Guam | Kosrae | RMI | Palau | Pohnpei | Yap | Region Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| Governance, Management, and Planning | 7 | 9 | 6 | 6 | 8 | 9 | 8 | 9 | 8 | 8 |
| Community, Partnerships | 4 | 4 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 3 |
| Small Rural Schools | 5 | 6 | 5 | 4 | 4 | 2 | 3 | 5 | 4 | 5 |
| At-Risk Youth | 3 | 2 | 1 | 1 | 3 | 3 | 2 | 1 | 2 | 2 |
| Curriculum and Instruction | 9 | 7 | 7 | 7 | 9 | 6 | 7 | 7 | 6 | 7 |
| Professional Development | 8 | 8 | 8 | 8 | 7 | 8 | 9 | 8 | 9 | 9 |
| Resource and Information Acquisition | 2 | 5 | 3 | 2 | 5 | 5 | 5 | 3 | 5 | 4 |
| Systemic Reform | 6 | 3 | 9 | 9 | 6 | 7 | 6 | 6 | 7 | 6 |
| Use of Technology | 1 | 1 | 2 | 5 | 1 | 1 | 1 | 2 | 1 | 1 |

Note: 9 = most progress; 1 = least progress

Rankings of progress in the nine need areas for each entity in the Pacific region are shown in Table 50. These rankings were similar among the entities and they generally correspond with regional rankings. Because many entities viewed each of the need areas as showing progress indicates the extent of agreement between rankings by the entities and the region. It also highlights which need areas showed the most progress. Need areas in Table 50 with rankings of 7, 8, or 9 indicate "Progress" and those with rankings of 1, 2, or 3 indicate "No Progress." Need areas with rankings 4, 5, and 6 indicate "Some Progress." The results are shown in Table 51.

Table 51. Number of Entities that Viewed Each Need Area as Showing Progress

| Need Area | (Counts by Number of Entities) | | Degree of Progress |
|---|---|---|---|
| | Progress | No Progress | Regional Rank |
| Governance, Management, and Planning | 7 | 0 | Progress |
| Community, Partnerships | 0 | 3 | No Progress |
| Small Rural Schools | 0 | 2 | No Progress |
| At-Risk Youth | 0 | 9 | No Progress |
| Curriculum and Instruction | 7 | 0 | Progress |
| Professional Development | 9 | 0 | Progress |
| Resource and Information Acquisition | 0 | 4 | No Progress |
| Systemic Reform | 4 | 1 | Progress |
| Use of Technology | 0 | 8 | No Progress |

As shown in Table 51, rankings for progress in the nine need areas are almost the same among the nine entities. Therefore, it can be concluded that *professional development*; *curriculum and instruction*; *governance, management and planning*; and *systemic reform* show the most progress in the Pacific region.

***How do the rankings of progress in the nine need areas as rated by all five roles of respondents differ from those rated by each individual role of respondents?***

Table 52. Need Areas Ranked According to Progress by Each Role

| Area | Administrator | Community | Principal | Student | Teacher | Region Rank |
|---|---|---|---|---|---|---|
| Governance, Management, and Planning | 8 | 7 | 8 | 9 | 8 | 8 |
| Community, Partnerships | 3 | 4 | 4 | 4 | 4 | 3 |
| Small Rural Schools | 4 | 3 | 6 | 5 | 5 | 5 |
| At-Risk Youth | 2 | 1 | 3 | 2 | 2 | 2 |
| Curriculum and Instruction | 7 | 5 | 7 | 8 | 7 | 7 |
| Professional Development | 9 | 8 | 9 | 7 | 9 | 9 |
| Resource and Information Acquisition | 5 | 9 | 2 | 3 | 3 | 4 |
| Systemic Reform | 6 | 6 | 5 | 6 | 6 | 6 |
| Use of Technology | 1 | 2 | 1 | 1 | 1 | 1 |

Note: 9 = most progress; 1 = least progress.

The rankings of progress in nine need areas for the Pacific region and for each of five role groups of respondents are shown in Table 52. These rankings were similar among role groups and they, for the most part, agree with the regional rankings. Because many role groups viewed each of the need areas as showing progress indicates the extent to which the rankings for the five roles agree with the regional rankings. It also highlights the need areas that showed the most progress. Need areas in Table 52 with rankings 7, 8, or 9 indicate "Progress" and those with rankings of 1, 2, or 3 indicate "No Progress." Need areas with rankings of 4, 5, and 6 indicate "Some Progress." The results are shown in Table 53.

Table 53. Number of Role Groups that Viewed Each Need Area as Showing Progress

| Need Area | (Counts by Number of Roles) | | Degree of Progress |
|---|---|---|---|
| | Progress | No Progress | Regional Rank |
| Governance, Management, and Planning | 5 | 0 | Progress |
| Community, Partnerships | 0 | 1 | No Progress |
| Small Rural Schools | 0 | 1 | No Progress |
| At-Risk Youth | 0 | 5 | No Progress |
| Curriculum and Instruction | 4 | 1 | Progress |
| Professional Development | 5 | 0 | Progress |
| Resource and Information Acquisition | 1 | 3 | Some Progress |
| Systemic Reform | 0 | 0 | No Progress |
| Use of Technology | 0 | 5 | No Progress |

As shown in Table 53, rankings of progress in the nine need areas are almost the same among role groups of respondents in the region. In this analysis by role group, *governance, management and planning*; *professional development*; and *curriculum and instruction* show the most progress in the Pacific region. Progress for *professional development*, *governance, management, and planning,* and *curriculum and instruction* is consistent, as shown in Tables 51 and 53. This indicates that, although there may be some differences among the entities or role groups, the conclusions concerning progress in the need areas are legitimate.

***How do the rankings of needs as shown by gaps between the importance of each need area and its progress computed for the Pacific region differ from those computed for each individual entity?***

Table 54. Need Areas Ranked According to Need (Need = Importance minus Progress for Each Entity)

| Area | Am. Samoa | Chuuk | CNMI | Guam | Kosrae | RMI | Palau | Pohnpei | Yap | Region Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| Governance, Management, and Planning | 3 | 1 | 4 | 5 | 1 | 1 | 1 | 1 | 2 | 1 |
| Community, Partnerships | 5 | 4 | 2 | 4 | 6 | 4 | 3 | 2 | 4 | 4 |
| Small Rural Schools | 2 | 5 | 1 | 1 | 4 | 9 | 6 | 3 | 1 | 2 |
| At-Risk Youth | 7 | 8 | 9 | 9 | 8 | 7 | 8 | 9 | 9 | 8 |
| Curriculum and Instruction | 1 | 3 | 3 | 7 | 2 | 3 | 4 | 5 | 7 | 5 |
| Professional Development | 4 | 2 | 5 | 3 | 3 | 2 | 2 | 4 | 3 | 3 |
| Resource and Information Acquisition | 9 | 7 | 7 | 8 | 7 | 8 | 7 | 8 | 5 | 7 |
| Systemic Reform | 6 | 6 | 6 | 2 | 5 | 5 | 5 | 6 | 6 | 6 |
| Use of Technology | 8 | 9 | 8 | 6 | 9 | 6 | 9 | 7 | 8 | 9 |

Note: 9 = most needed; 1 = least needed

Rankings of needs in nine need areas for the Pacific region and for each of the nine entities are shown in Table 54. These rankings are similar among the entities and most of them agree with regional rankings. Rankings for areas of greatest need show the extent of agreement between the entities and the region. The rankings also indicate which of the nine needs are the most needed. Need areas in Table 54 with rankings of 7, 8, or 9 indicate "Need;" those with 1, 2 or 3 indicate "No Need." Need areas with rankings of 4, 5, and 6 indicate "Some Need." The results are shown in Table 55.

Table 55. Number of Entities that Viewed Each Need Area as Needed

| Need Area | (Counts by Number of Entities) | | Degree of Need |
|---|---|---|---|
| | Need | No Need | Regional Rank |
| Governance, Management, and Planning | 0 | 7 | No Need |
| Community, Partnerships | 0 | 3 | No Need |
| Small Rural Schools | 1 | 5 | Somewhat Need |
| At-Risk Youth | 9 | 0 | Need |
| Curriculum and Instruction | 2 | 5 | Somewhat Need |
| Professional Development | 0 | 6 | No Need |
| Resource and Information Acquisition | 8 | 0 | Need |
| Systemic Reform | 0 | 1 | No Need |
| Use of Technology | 7 | 0 | Need |

As shown in Table 55, rankings of needs--the gap between importance and progress--in the nine need areas are almost the same among the nine entities. Therefore, it can be concluded that *at-risk youth, resource and information acquisition,* and *use of technology* are the most needed areas in the Pacific region.

***How do the ranks of needs as shown by the gaps between the importance of each need area and its progress computed for all roles of respondents differ from those computed for each role of the respondents in the region?***

Table 56. Need Areas Ranked According to Need (Need = Importance minus Progress) by Each Role

| Area | Administrator | Community | Principal | Student | Teacher | Region Rank |
|---|---|---|---|---|---|---|
| Governance, Management, and Planning | 1 | 1 | 3 | 2 | 1 | 1 |
| Community, Partnerships | 7 | 3 | 5 | 1 | 3 | 4 |
| Small/Rural Schools | 3 | 6 | 1 | 4 | 2 | 2 |
| At-Risk Youth | 9 | 9 | 7 | 7 | 9 | 8 |
| Curriculum and /Instruction | 4 | 5 | 4 | 3 | 5 | 5 |
| Professional Development | 2 | 2 | 2 | 6 | 4 | 3 |
| Resource and Information Acquisition | 6 | 7 | 8 | 8 | 7 | 7 |
| Systemic Reform | 5 | 4 | 6 | 5 | 6 | 6 |
| Use of Technology | 8 | 8 | 9 | 9 | 8 | 9 |

Note: 9 = most needed; 1 = least needed

Rankings of needs in nine need areas for the Pacific region and for each of five role groups of respondents are shown in Table 56. These rankings were similar among the roles and most of them agree with the regional rankings. Rankings by role groups for areas of greatest need show the extent of agreement with the regional rankings. The rankings also indicate which of the nine need areas are the most needed. Need areas in Table 56 with rankings of 7, 8, or 9 indicate "Need," and those with 1, 2, or 3 indicate "No Need." Need areas with rankings of 4, 5, and 6 indicate "Some Need." The results are shown in Table 57.

Table 57. Number of Role Groups that Viewed Each Need Area as Needed

| Need Area | (Counts by Number of Entities) | | Degree of Need |
|---|---|---|---|
| | Need | No Need | Regional Rank |
| Governance, Management, and Planning | 0 | 5 | No Need |
| Community, Partnerships | 1 | 3 | Somewhat Need |
| Small Rural Schools | 0 | 3 | No Need |
| At-Risk Youth | 5 | 0 | Need |
| Curriculum and Instruction | 0 | 1 | No Need |
| Professional Development | 4 | 4 | No Need |
| Resource and Information Acquisition | 0 | 1 | Need |
| Systemic Reform | 5 | 0 | No Need |
| Use of Technology | 0 | 0 | Need |

As shown in Table 57, rankings of needs in the nine need areas are almost the same among the role groups of respondents in the region. It can be concluded that the different role groups identified *at-risk youth*, *resource and information acquisition*, and *use of technology* as the most needed areas in the Pacific region. These findings are consistent in Tables 55 and 57. This indicates that, although there may be some differences among the entities or roles, the conclusions concerning the most needed need areas are legitimate.

## CONCLUSIONS

Needs assessment can be used for decision making in providing effective services. From the standpoint of cost--effectiveness, services that are needed should be supported; those that are not should not supported. Needs assessment can also be used to evaluate the impact of formative and summative studies of an intervention. Therefore, needs assessment was included in PREL's contract with OERI to help PREL in making decisions to effectively serve the educational needs of the Pacific region.

A discrepancy model where a "need" is indicated by a gap between desired performance and actual performance, was used for this study. Larger gaps in discrepancy mean greater needs. To measure the educational needs of the Pacific region, 34 needs grouped into nine need areas were presented in the form of a questionnaire that was distributed to respondents in the region. Respondents were asked to rate the importance (as a measure of desired performance) and the progress (as a measure of actual performance) for each need. Gaps between ratings were regarded as the magnitude of educational needs in the region.

Data for this assessment were collected from December 1993 to September 1994. With the assistance of local R&D groups, data were collected through PREL staff who paid visits to entities in the region. Because of distances between entities, data collection process needed much effort from everyone involved in this study. More than 1,054 persons from 10 entities in the region responded to the needs assessment questionnaire. Because of the small sample size (n=8), the data from the State of Hawai'i was eliminated before the data analysis was done. The respondents included teachers (including resource teachers), secondary school students, principals or assistant principals, district/central specialists, district/central administrators, college/university students, college/university faculty, parents (mostly PTA members), and community leaders. In the analysis, these roles of the respondents were regrouped into five roles--students, teachers, principals, district/central administrators, and community. The largest group of the sample for the entities, except for American Samoa and Pohnpei, and for the whole region, consisted of teachers (31.3 percent of the 1,046 respondents).

Data were analyzed for each entity and for all the entities combined. The following four questions served as analytical objectives for each entity:

- Which of the nine educational need areas respondents in the entity view as the most important?
- Of the nine educational need areas, how do the respondents in the entity observe progress?
- In which need areas is the gap between the importance of a need area and its progress, the largest in the entity?
- What is the difference between the entity and the Pacific region in importance, progress, and needs?

The following nine questions were asked in the analysis for the entire Pacific region, using the combined data from all nine entities:

- Which of the nine educational need areas respondents in the Pacific region view as the most important?
- In which of the educational areas do the respondents in the Pacific region view progress?
- In which need areas is the gap between the importance of a need area and its progress the largest in the Pacific region?
- How do ranks of importance of the nine need areas as rated by the Pacific region differ from those rated by each entity ?
- How do ranks of importance of the nine need areas as rated by the Pacific region (i.e., by all roles) differ from those rated by each role of respondents?
- How do ranks of the progress in the nine need areas as rated by the Pacific region differ from those rated by each entity?
- How do ranks of progress in the nine need areas as rated by the Pacific region (i.e., by all roles) differ from those rated by each role of respondents?
- How do the gaps between the importance and progress of each need area for the Pacific region differ from those for each entity?
- How do the gaps between the importance and progress of each need area for the Pacific region (i.e., by all roles) differ from those for each role of respondents?

Results of the assessment indicated that, although slight differences existed among the nine entities:

1. *Professional development, systemic reform,* and *resource and inform* were generally found to be the most important areas for the education of the Pacific region.
2. *Professional development; governance, management, and planning*; and *curriculum and instruction* were the areas that generally showed the most progress in the education of the Pacific region.
3. *Use of technology, at-risk youth*, and *resource and information acquisition* were the most needed areas to be addressed, as indicated by the largest gaps between the importance and the progress of each need area.
4. *Community, partnerships*; *small rural schools; and governance, management, and planning* were generally found to be the least important areas for the education of the Pacific region.

5. *Use of technology, at-risk youth,* and *resource and information acquisition* were the areas that generally showed the least progress in the education of the Pacific region.

6. *Governance, management, and planning*; *professional development*; and *community, partnerships* were the least needed areas to be addressed, as indicated by the smallest gaps between importance and progress in each need area.

Because these findings were consistent among the entities and among the different roles of respondents, it was concluded that, despite the fact that the majority of respondents were teachers (31.3 percent) and students (23.8 percent), findings 1 through 6 have relatively high reliability.

As with any study, this study had limitations. One pitfall was the usage of undefined terminology. For example, the term, "Small Rural Schools," may have had different meanings in different entities in the Pacific region. This could have led to low ratings of importance and/or progress in that particular need area. However, because the findings regarding importance, progress, and the need (as shown by the gap between them) were consistent among the entities and among roles of respondents, it is probable that they are true throughout the Pacific region, at least during the data collection period.

**Implications**

Findings concerning importance, progress, and the need of nine need areas specified in this study are summarized in Table 50. What is important may not necessarily be in need of attention, and what is termed a need may not be important. Based on this assumption, the needs assessment should look for areas that are both important and in need.

Table 58. Summary of Findings

| | Entity | | | Role | | | Region | | |
|---|---|---|---|---|---|---|---|---|---|
| **Need Area** | **Impt** | **Prog** | **Need** | **Impt** | **Prog** | **Need** | **Impt** | **Prog** | **Need** |
| Governance, Management, and Planning | Some | Yes | No | No | Yes | No | Some | Yes | No |
| Community, Partnerships | No | No | No | No | No | Some | No | No | Some |
| Small Rural Schools | No | No | Some | No | No | No | No | Some | No |
| At-Risk Youth | Yes | No | Yes | No | No | Yes | Some | No | Yes |
| Curriculum and Instruction | Yes | Yes | Some | Yes | Yes | No | Some | Yes | Some |
| Professional development | Yes | Yes | No | Yes | Yes | No | Yes | Yes | No |
| Resource and Information Acquisition | Yes | No | Yes | Yes | No | Yes | Yes | Some | Yes |
| Systemic Reform | Yes | Yes | No | Yes | Yes | No | Yes | Some | Some |
| Use of Technology | Some | No | Yes | Some | No | Yes | No | No | Yes |

Notes: **Impt** = Importance
**Prog** = Progress

Table 58 summarizes findings presented in Tables 53, 55, and 57.

As shown in Table 58, only one area, *resource and information acquisition*, satisfies the criterion of being both important and in need as recognized by entities, roles, and region. Next are *at-risk youth, use of technology, curriculum and instruction,* and *systemic reform,* which are considered "somewhat important and in need," or "important and somewhat in need," or "somewhat important and somewhat in need" among entities, roles, and region.

Therefore, it can be concluded that these five areas are probably the areas PREL should focus on in serving the educational needs of the Pacific region. However, because PREL provides regional services through the entities, each entity's educational issue priorities should be the priority for PREL. As such, PREL should focus its efforts in the areas of *at-risk youth* and *resource and information acquisition,* where there is importance and need, but little progress has been made.

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# APPENDIX

Questionnaire

# PACIFIC REGION EDUCATIONAL LABORATORY
## Regional Needs Assessment

Date: ___/___/1994

**Your entity:** (Check one.)

☐ 1. American Samoa ☐ 2. Chuuk ☐ 3. CNMI ☐ 4. Guam ☐ 5. Hawaii
☐ 6. Kosrae ☐ 7. RMI ☐ 8. Palau ☐ 9. Pohnpei ☐ 10. Yap

**Your role:** (Check one.)

☐ 1. Teacher/Resource Teacher ☐ 2. Secondary School Student ☐ 3. Principal/Assistant Principal
☐ 4. District/Central Specialist ☐ 5. District/Central Office Administrator ☐ 6. College/University Student
☐ 7. College/University Faculty ☐ 8 Parent ☐ 9. Other (Specify): _____

**Your agency/institution:** (Check one)

☐ 1. Public ☐ 2. Private ☐ 3. Other (Specify): _____

**History of participation in PREL's Regional Needs Assessment:** (Check all that apply.)

☐ 1. This is my first time after December 1993. ☐ 3. I filled a form similar to this before December 1993.
☐ 2. This is my second time after December 1993. ☐ 4. Other (Specify): _____

| Rating | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| | No Importance No Progress | | | | | | Essential Importance Exceptional Progress |

| The following needs are reflected in the PREL Scope of Work for its laboratory contract. | How important is this need to your jurisdiction, and how much progress has been made thus far? |
|---|---|
| **Governance, Management, and Planning** | |
| 1. Increase understanding of school administrators/ leaders of the value of developing policies, rules, and guidelines. | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 2. Make better use of information for planning, policy development, and decision making. | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 3. Increase understanding among Board of Education members of their role and functions and the kinds of skills they may need to develop. | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 4. Improve the organization and management of the school(s). | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 5. Determine regional and local education system needs. | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| **Community, Partnerships** | |
| 6. Decide which educational outcomes are valued by the community. | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |

| Rating | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| | No Importance No Progress | | | | | | Essential Importance Exceptional Progress |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 7. Develop and maintain effective school partnerships with businesses, community agencies, and organizations. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Clarify the role of the school to meet the demands for early childhood care and education. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Small Rural Schools** | | | | | | | | |
| 9. Develop and carry out policies to provide better services in small/rural schools. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Provide equitable learning opportunities and effective school practices in small/rural schools. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Increase understanding of the factors affecting educational opportunity in the more isolated schools. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **At-Risk Youth** | | | | | | | | |
| 12. Develop and carry out policies and programs to provide services to at-risk youth. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Meet individual needs of students who are at risk of school failure. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Increase understanding of the factors affecting at-risk youth in the Pacific. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Curriculum and Instruction** | | | | | | | | |
| 15. Improve student outcomes in math and science. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Assure that the curriculum is culturally appropriate. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. Assure that students understand their own culture and respect the differences of other cultures. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. Revise and/or develop appropriate curriculum structure and content. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. Improve the relationship, connection, or match between schooling and economic/community development. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| Rating | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| | No Importance No Progress | | | | | | Essential Importance Exceptional Progress |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 20. Improve the relationship, connection, or match between home/family learning styles and learning in preschools and elementary schools. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Professional Development** | | | | | | | | |
| 21. Provide training to principals, teachers, and subject matter specialists. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. Strengthen the abilities of the local people to design, plan, implement, and evaluate educational activities. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. Improve upon current methods of assessing student performance. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. Strengthen participation of institutions of higher education in professional development of public education personnel (i.e., teachers, principals, specialists, administrators). | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Resource and Information Acquisition** | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. Construct and/or remodel school facilities. | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. Assure sufficient and equitable funding for all schools. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. Obtain information about curriculum, instruction, policy development, research, and evaluation. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Systemic Reform** | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. Involve teachers in school reform activities. | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. Involve teachers in setting various standards (i.e., curriculum standards, performance standards, teacher standards, etc.). | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. Promote active participation of teachers in the systemic reform of education. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| Rating | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| | No Importance No Progress | | | | | | Essential Importance Exceptional Progress |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Use of Technology** | | | | | | | | |
| 31. Examine/identify the potential role of modem technology in the instructional process. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. Use modern technology (especially Computer Assisted Instruction) at the classroom level. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. Increase use of electronic means for information gathering, retrieval, and sharing with other practitioners to keep up with the latest promising/proven practices in education. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. Involve educators in electronic networking to share resources and enhance their professional development. | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Other needs: | Importance: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Progress: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Your additional comments:


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